

INSIDE DOPE

by GEORGE F. TAUBENECK

Stories of the Week
Add Iron Curtain Stories
Quips of the Week
Quotes of the Week
Signs of the Times
Out of Our Mailbag
The Readers Always Write
Philosophy of the Week
Buttered Side UP
Seats in the Bleachers
The America of Our Forefathers

Stories of the Week

A titillating Young Thing applied for a stenographic job in the U. S. Treasury Department. She passed all the oral tests submitted by the T.D.'s Director of Personnel until this question came up:

"What are your reasons for wanting a job with the U. S. Treasury?"
"I just love money," she cooed.

"Didja know that Pete is a magician?"

"Why no. What can he do?"

"He walks down any street, see, and all of a sudden he hollers 'Alakazam.'"

"Then what happens?"

"He turns into a bar."

Soon after a pair of crazy Puerto Ricans attempted to assassinate her husband, Bess Truman submitted to one of her rare interviews.

Asked what she thought about the President's narrow escape from death Mrs. Truman was laconic, but firm.

"I didn't like it," she sphinxed.

Add Iron Curtain Stories

In Czechoslovakia, we hear, a new version of the old fable about the crow and the fox is going the rounds. This one has it that the crow was perched on a tree limb with a piece of cheese in its beak.

"Comrade," slied the fox, "how wonderfully you sang the *Internationale* at our last party meeting! Let me hear you sing it again."

No fool, the crow tucked the cheese under his wing before opening his mouth to sing the Communist anthem.

"What a wonderful bird you are," flattered the fox, trying a different tack. "And how nice that your wife is friendly with our party leader."

Cawing and flapping in protest at this foul (fowl?) slander, the crow forgot all about the cheese and dropped it. The fox recovered the tidbit gleefully and ate it with relish (no mustard).

Moral: If your wife is running around with a party leader, it's wise to keep your big mouth shut.

Quips of the Week

Definition of Courtship: The short interlude between lipstick and mopstick.

"If you hesitate to make a quick decision, you're neither executive timber—nor a baseball fan."—*Wall Street Journal*.

"Slang is language that takes off its coat, spits on its hands, and goes to work."—CARL SANDBURG.

"Why call money dough? Dough sticks to your fingers."—IMP.

"There's only one endeavor in which you can start at the top—and that's digging a hole."—*Pure Oil News*.

"The first glass of cognac is utilitarian. It is like a beautiful woman who has devoted herself entirely to doing good; to nursing, for example. Nothing is more admirable, but one would like to meet her sister."—JOHN COLLIER.

Quotes of the Week

"We cannot all be great but we can attach ourselves to something that is great."—HENRY EMERSON FOSDICK.

"If you have something to do that is worthwhile doing, don't talk about it."—(Concluded on Page 12, Column 1)



AIR CONDITIONING & REFRIGERATION NEWS

THE NEWSPAPER OF THE INDUSTRY

PUBLIC LIBRARY

JAN 8 1951

DETROIT

Vol. 62, No. 2, Serial No. 1138

January 8, 1951

Subscription Price, \$5 Per Year

Reentered as second-class matter October 3, 1936 at the post office at Detroit, Michigan, under the Act of March 3, 1879.
Trade Mark Registered U. S. Patent Office. Copyright 1951, by Business News Publishing Co.

Kelvinator, Hotpoint, Philco Introduce New Lines on Eve of Marts' Opening In Chicago

Medium Price Models Get Emphasis In '51 Offering by Hotpoint

CHICAGO—Nine new 1951 refrigerator models including two in the medium price bracket with across-the-top frozen food compartments, defrost indicators, door shelves, and butter conditioners are being shown at the home furnishings market here by Hotpoint, Inc.

Also being introduced is an automatic electric tumbler clothes drier claimed to be the first in the industry that "eliminates moisture, heat, and lint in the room."

Other new products include two new home freezers in 15 and 23-cu. ft. sizes, eight new electric range models, and a new garbage disposal unit.

Heading the electric range line are lighted pushbutton control types with larger ovens, new time measures, and chromium grids on broiler pans. The line includes a double-oven range (Concluded on Page 23, Column 1)

Philco Distributors See 11 Refrigerators

CHICAGO—An automatic defrost system for its refrigerators, and a new built in "jiffy griddle" that reportedly adds 50% more surface cooking capacity to an electric range are among features shown here as Philco Corp. introduced its 1951 refrigerators, electric ranges, home freezers, and room air conditioners.

The new appliances were introduced last week to 800 members of the Philco Distributor Organization, assembled here for the company's mid-winter national sales convention. Thomas A. Kennally, president of Philco refrigeration division, said "automatic defrosting in the new Philco refrigerators is done for the housewife by a built in clock and defrosting units, which defrost the entire refrigerator once a day. The whole defrosting process takes only 3 to 10 minutes, and foods stay frozen."

"Another important design feature is the elimination of wall-sweating. Excess moisture cannot condense on (Concluded on Page 4, Column 4)

Sen. Dirksen To Speak At NARDA Convention

CHICAGO—Senator Everett Dirksen of Illinois, who defeated Scott Lucas, the former Senate majority leader in the November election, will address the annual banquet of the National Appliance and Radio Dealers Association in the Stevens hotel on Tuesday, Jan. 16, Ira Lavin, acting managing director of the association announced recently.

The banquet is one of the highlights of the association's annual convention which will run from Sunday, Jan. 14, through Wednesday, Jan. 17.

Scheduled for the affair are more than a dozen talks by industry figures and 10 panel discussions on subjects of particular interest to appliance retailers.

Representatives from manufactur- (Concluded on Page 28, Column 4)

Mfrs. Have Goods But Need Answers

CHICAGO—With Kelvinator, Hotpoint, and Philco announcing full lines of household refrigerators and other major appliances which they produce on the eve of the opening of the mid-winter home furnishings markets, and other manufacturers ready to show complete 1951 lines introduced previously or which will bow in at the marts, the year seemingly starts off like any "normal" sales year.

But retailers in attendance at the American Furniture Mart and the Merchandise Mart will have plenty of questions to ask the manufacturers. They will want to know how long they can expect full lines, what is being done about allocating merchandise, what happens to price changes made since Dec. 1 and to the price structure generally, and how the retailer should plan generally for 1951 operations.

Manufacturers of refrigerators, home freezers, room coolers, and other major appliances have thought that on the basis of what the government has revealed thus far, they can produce at the rate of 65-75% of 1950 figures, for the first quarter of 1951. And there is considerable feeling in some quarters that retailers may have to hustle to sell what the manufacturers will produce. "But with the government doing its planning and issuing orders on a day-to-day basis, no long-range predictions that will carry any weight are possible."

Copper, Cobalt, Aluminum Order Changes May Alter Producers' Plans

NPA Bans Copper Use In Manufacture of 300 Items

WASHINGTON, D. C.—Further restrictions on the use of copper have been ordered by the National Production Authority in an order, effective March 1, banning the use of copper in the manufacture of 300 designated products.

However, the order did not—as had been predicted in some quarters—make any further direct reductions in copper use by manufacturers. (Under a previous action, manufacturers were restricted, during January and February, to use 85% of the average amount of brass mill and wire mill products they used during the first six months of 1950).

The order, in certain specific cases, permits use of copper products in functional parts. For example, in the part of the order dealing with household electrical appliances (including refrigerators, in parts of which copper is vital), the prohibiting order says that it applies "except where copper products or copper base alloy products are used for functional parts where the properties supplied by the copper are essential and satisfactory substitutes are not available."

This is what it says about fittings: "Unions and union fittings (except seats, and except for other parts of unions and union fittings (1) where and to the extent that the physical and chemical properties of the liquid or gas passing through the union or (Concluded on Page 28, Column 2)

Major Design Changes Set by Kelvinator For 1951 Appliances

DETROIT—Major engineering changes, greater beauty, added spaciousness, and convenience highlight Kelvinator's new 1951 electric refrigerators, electric ranges, and home freezers.

The new models are being introduced to the trade at the American Furniture Mart's winter show in Chicago, and in 49 dealer showings across the country.

C. T. Lawson, vice president in charge of Kelvinator sales, said the new lines include eight refrigerators, seven electric ranges, and four home freezers. Original plans had called for public introduction of 1951 electric ranges and home freezers in early November, and new refrigerators in early December, but shortages of materials delayed production of sufficient models to completely sample dealers.

Lawson said the 1951 line included a new 40-in. width series of electric ranges, featuring a deluxe double-oven model, which replaces Kelvinator's former 39-in. width line; a completely new line of refrigerators; and restyled freezers equipped with additional convenience features.

The refrigerator line has an entirely new exterior design. It includes a two-door model with a new dual-control refrigeration and humidity control system, and two new 7-cu. ft. (Concluded on Page 4, Column 1)

Control on Cobalt To Hit Radio, TV Output

WASHINGTON, D. C.—The complete government control of cobalt through order M-10 which becomes effective Feb. 1 will apparently very definitely affect production of radio and television sets, and could affect production of refrigerators, commercial refrigerators, and major appliances.

After Feb. 1 users of cobalt will have to apply for permission to buy specified quantities of the material. During January, the amount of cobalt available for all civilian purposes will be about one third the quantity consumed in January, 1950, and will apparently be apportioned out on the basis of January, 1950, takings.

There is some feeling that as far (Concluded on Page 28, Column 2)

Easing of Aluminum May Cancel Cutback at G-E

ERIE, Pa.—A modification of the government directive restricting the use of aluminum may cancel a projected cutback in employment in the General Electric refrigeration plant here.

The cutback, previously announced for early in January, may be set back for an indefinite period and the layoff itself will not be nearly as drastic as at first indicated.

Works Manager Bertram Miller (Concluded on Page 28, Column 2)

'Fewer Models' Predicted by 'Inside' Story

Dual-Temp. Units Probably Out, Indicates Member Of Wholesalers Group

KANSAS CITY, Mo.—An "insider's" picture of how government controls designed to facilitate defense production will affect the production of refrigerators, home freezers, room air conditioners, and other major appliances, was given by Kenneth G. Gillespie, general manager of the Jenkins Music Co., here, and a member of the Radio, Television, Household Appliance Wholesalers Committee, NPA, at a meeting of the Electric Association here.

Gillespie sees government regulations resulting in the following:

1. Elimination of dual-temperature refrigerators, and most of the "shiny" and deluxe trim on other models.

2. Continuance of the production of refrigerators and appliances unless there is an outbreak of an all-out war or the feeling on the part of officials that such is imminent. All factors point to a considerable decline from 1950's production rates. This decline may go as high as 65-75% on radios and television sets (because of strict restrictions on the use of cobalt), but possibly considerably less on refrigerators and other white goods.

3. Lines of appliance products will probably be shortened, and the models produced will be simpler, without frills, in line with government recommendations.

4. If industry suggestions are followed, great emphasis will be placed upon replacement parts for refrigerators and appliances. The wholesalers group is asking that a priority second only to top military needs, be granted the production of such replacement parts.

5. There will probably be some deterioration in quality of appliances, because of the necessary substitution of materials.

Amana To Show New Large Freezer

AMANA, Iowa—A new 24-cu. ft. upright home freezer will be introduced by Amana Refrigeration, Inc., during its national distributors' sales conference Jan. 6 and 7 in Cedar Rapids, and at its space in the Merchandise Mart during the Chicago mid-year home furnishings markets beginning Jan. 8.

Following the sales conference and a visit to the Amana plant at Amana the morning of Jan. 8, the party of company officials and distributors are to be flown to Chicago for the markets.

The new 24-cu. ft. freezer, say Amana officials, was introduced in response to demands of retailers (Concluded on Page 4, Column 5)

ASHVE Lists Program

For Meeting Jan. 22-25

NEW YORK CITY—"Man and His Relationship to Air" will be the subject of a symposium by leading scientists and engineers in the field, at the 1951 annual meeting of The American Society of Heating and Ventilating Engineers.

Six sessions during which 17 papers will be given are listed on the technical program released by John James, chairman of the society's program and papers committee. The meeting will be held in Philadelphia, Jan. 22-25.

Topics to be covered include combustion, studies on bituminous coal, fuel oil, and smoke measurement, electrostatic precipitation, heat pump performance, snow melting, effective heat for steam heated structures, transportation heating and controls, solar radiation, axial flow fans, and panel heating and cooling.

The first session will be opened on Monday, Jan. 22, with ASHVE president Lester T. Avery, presiding. The (Concluded on Page 21, Column 1)



SELLING EGGS used to be Ken McQuade's principal source of revenue until he found this refrigerated walk-in helped sell other items. Soon he added more equipment, found his sales kept rising.



REFRIGERATED DISPLAY made big difference. Arrows (l. to r.) indicate beverage cooler, frozen food case, vegetable case, ice cream display case, glass reach-in, and meat case—all packed in small space.

Refrigeration Helps Small 'Egg Store' Grow Into Busy Market

FERNDAL, Mich.—"The Market Refrigeration Built" might well be the name of Ken's Market, a thriving community store strategically located on busy Livernois Ave., just north of the Detroit city limits. And at the same time Ken McQuade, the genial, aggressive owner, might be considered a "refrigerated egg man," in place of the oldtime butter and egg man.

Growth of the market since it was established on May 25, 1947, has been a tribute to American enterprise, and to the tools of the food retailing trade—built by the refrigeration industry. Prior to the above date, Ken McQuade was an "egg man"—peddling eggs from door to door throughout his home community. The original market, built for the retailing of eggs, was 20 ft. wide, and barely 25 ft. deep.

At the time the market was established, Ken's first acquisition was an ancient walk-in cooler, that, incidentally, is still in use. The original ice bunker doors had to be closed, structural repairs made, and the exterior improved, before the old "box" was ready for mechanical refrigeration. But all this work was done for a purpose.

WALK-IN EARNED STORE REPUTATION FOR FRESHNESS

According to Ken McQuade, who "knows his eggs" rather than his onions, an egg kept at 45° F. for two weeks is fresher than an egg kept at 80° F. for a single day. Thus his old walk-in cooler was used to maintain a reputation for strictly fresh eggs.

A license to handle beer and wine was obtained later, and at that time precious space in the walk-in cooler was divided between beer and eggs.

"The old cooler used to go bad every now and then," Ken says ruefully, "and our beer sales would fall way off. As soon as refrigeration was restored, our beer business would pick right up again."

Sold on the use of refrigeration, Ken soon acquired an Achs frozen

food case of the open top type, a small meat case, and a display type ice cream dispenser. With this much refrigeration equipment, and one short center island in the tiny market, there was hardly room for the customers to turn around.

The refrigerated storage of fresh eggs brought Mother—the cold beer brought Father—and the many varieties of bulk ice cream brought all the kids trooping in after school. At certain times of the day and evening, Ken's Market resembled the only store in a frontier community. There was nothing to do but expand.

This year "the Market Refrigeration Built" was extended about 100 ft. back on the same property, and a back room was added. The old walk-in cooler was moved to the rear of the store, and the back room is used for storage and egg candling. The customer area is devoted to more and more refrigeration equipment. The walk-in refrigerator is now powered by a G-E compressor, installed by the Syler Fixture Co., of Detroit.

Along with the original refrigeration equipment, the store now boasts a McCray Koldflo meat case, an enormous glass reach-in built by Tyler Fixture Co., and a three bay Puffer-Hubbard dry storage beverage cooler. There is also an additional Frigidaire ice cream display case, and a "Snow Iced" vegetable display case, that is supplied with ice daily.

OFF-BRAND BEER SELLS WHEN IT GETS PROPER DISPLAY

According to Ken McQuade the secret of successful food merchandising is getting the merchandise where it can be seen, and be reached, by the shopper. "All we have to do with some special brand of beer," Ken relates, "is to put it in the glass front walk-in case, and it will be gone in a day or two. Formerly, special or unusual brands of beer would not sell at all. You will notice that we stack packages of canned beer in front of our beverage cooler,

where people can pick them up—and they do."

The large glass reach-in case is now also used as the chief egg merchandiser. Eggs stored in the case are clearly marked "Extra Large," "Large," "Medium," and "Small" and the daily price schedule is posted where Mrs. Shopper can read it. Since this case was installed the store is selling in excess of 600 dozen a week—an enviable business for any "butter and egg man."

Like other expansion programs of American business under our free enterprise system, Ken's Market has created more jobs for more people. The current staff of the store consists of Cullie Stover, Mrs. Vera Bailey, Margaret McGowan, Nancy A. Ryan, and Frank Griffo, the stock boy. Further, Mrs. McQuade supervises the processing of eggs. The staff of seven people is far larger than that usually found in independent or chain neighborhood stores.

Ken McQuade is justly proud of his market, and the gleaming refrigeration equipment that is serving his many customers so well. And with full faith in refrigeration, as an asset to food merchandising, he is making plans for the future. After all, there is still wall space, and counter space, in the new store, that do not yet have refrigerated equipment. One day soon, Ken avows, they will.

Carrier Earnings Exceed \$3,000,000 for Fiscal Year

SYRACUSE, N. Y.—Preliminary earnings of Carrier Corp. for the fiscal year ended Oct. 31, 1950, were \$3,164,450, or \$4.99 per common share, Cloud Wampler, president, reported to stockholders recently.

This compared with \$1,834,967, or \$2.72 per common share for the preceding fiscal year.

Wampler declared, "Carrier entered its new year with a large backlog and orders are still being booked at a highly satisfactory rate."

"However, material shortages are already interfering with production and this situation will probably get worse rather than better. It is hoped that the decline in civilian business will be offset by defense contracts."

In explaining to stockholders why they are getting the usual dividend of \$1 per share in the face of the company's increased earnings, Wampler explained:

"Additional cash disbursements are, we believe, not wise in view of the rapidly increasing business of the corporation which was up 35% in fiscal 1950."

Remington Appoints Traynor Coordinator Of Military Business

AUBURN, N. Y.—Appointment of Harry S. Traynor as coordinator of military business of the Remington Air Conditioning Div., Remington Corp. here, maker of room air conditioning units, has been announced by Herbert L. Laube, president.

Traynor in his position as staff assistant to the president, will be responsible for the application to military uses of standard Remington products as well as the utilization of a portion of the company's enlarged Auburn manufacturing facilities for the production of special products developed solely for military use.

A high priority order for one such product has already been received and is to go into production in February, it was explained.

A mechanical engineering graduate of the University of Kentucky, Traynor joined the student training course of Carrier Corp. in 1935 and subsequently was employed in the Carrier International Div. at Newark and Syracuse.

In 1942 Traynor left Carrier to enter military service. He was an officer on the staff of General L. R. Groves, at Oak Ridge, Tenn., and had attained the rank of lieutenant colonel, Corps of Engineers, upon his return to civil life in 1946.

At that time he assumed the position of manager of the Regent Knitting Co., Inc., Syracuse, N. Y., a position he resigned to return to the air conditioning business with Remington.

"There seems to be a definite trend, in the military services, toward small self-contained units as against the larger, more cumbersome, less mobile types of refrigeration and air conditioning equipment," Traynor states. "The advantages of small standardized units from the standpoint of logistics are obvious," he added.

New Dallas Truck Terminal Will Be Air Conditioned

DALLAS—The 15,000-sq. ft. headquarters unit of the new Central Freight Lines, Inc. truck terminal here, will be air conditioned, according to T. H. Callan, Dallas manager of the Waco firm.

Callan said the construction has already begun on the 76,610-sq. ft. terminal on a 9.5 acre tract on Inwood Road near Hines Blvd. Callan claims the terminal will be one of the largest privately owned truck terminals in the country.

Open-Type, Belt-Driven Condensing Units Exempt From Freezer Excise Tax

WASHINGTON, D. C.—Sales by manufacturers of open type, belt-driven condensing units are not taxable under the provisions of the freezer excise tax recently enacted, Charles J. Valaer, deputy commissioner of internal revenue in the U. S. Treasury Department, declared in a formal statement recently. (Story reporting this action appeared originally in Dec. 18 issue of the NEWS).

Valaer's statement said, "It has recently been determined that sales by manufacturers of open type, belt-driven condensing units are not taxable under the provisions of section 3405(b) of the Internal Revenue Code, as amended by the Revenue Act of 1950."

"However, if an open type, belt-driven condensing unit is sold as part of a complete household type refrigerator or quick freeze unit, tax will attach under section 3405(a) of the Code to the total sale price, including any charge for the condensing unit."

"It is proposed to publish in the Federal Register a contemplated regulation concerning this tax as well as the tax on television receivers prior to adoption (of the regulation)."

"The industry will be entitled, under this procedure, to submit suggestions or objections regarding the proposed regulations within 30 days of the date of the publication in the Federal Register."

Change In Basing Point Boosts Magic Chef Prices

ST. LOUIS—A change in basing points, instituted by the American Stove Co. here to "make the freight stand on its own" will increase the suggested retail prices of Magic Chef domestic ranges from \$5 to \$16, the range company reported recently.

Previously the company had priced its ranges f.o.b. American Stove sales division warehouse in St. Louis, New York City, Chicago, Cleveland, Philadelphia, Atlanta, and Los Angeles.

Now the ranges are priced f.o.b. factory here. This action, it was said, will raise the price to buyers in less than carload lots, but reduce it to carload and pool-carload purchasers. A 6% discount has been inaugurated for the latter type shipments.

The action taken, one factory spokesman said, is designed to take care of increased costs of production and distribution only.

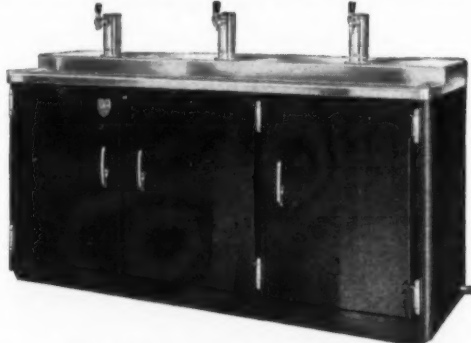
Store Moves Trade-Ins by Offering 30-Day Free Service Guarantee

LOS ANGELES—In a half-page advertisement last month in the Daily News, the Famous department store offered "reconditioned nationally advertised refrigerators . . . prices start at \$59.95, others priced to \$99—DI-7 Frigidaire, like new, \$149."

The store offered a "full guarantee" for 30 days, with free service. A note in the advertisement stated, "If you are not entirely satisfied with your purchase at the end of 30 days, we will allow you the full purchase price on any new refrigerator in the store."

LARGE CAPACITY...MULTI-PURPOSE

This COMPACT
3 on tap
plus 1 in storage
PERLICK
Direct Draw
DISPENSER



with patented AIR COOLED FAUCET STANDARDS
"TO CASH IN ON THE TREND TO DRAFT BEER."

in Black or
Stainless Steel

with or without
Condensing Unit

There's big business for the equipment house, in this large capacity Perlick Direct Draw Dispenser . . . and big business volume, too, for the dispensing establishment that installs it! Holds 4 stainless steel or aluminum half-barrels—three on tap and one in storage at the proper temperature, readily accessible for instant use. This is also an excellent model to equip with the Carbotap unit—or other optional equipment. Get in on the big profits you can enjoy from the big Perlick line.

Perlick
BRASS CO.
Milwaukee 10, Wis.



LOUDON AUTOMATIC ICE CUBE MAKER

EXCLUSIVE FRANCHISE AGREEMENTS NOW AVAILABLE FOR FIRST TIME. WRITE IMMEDIATELY FOR TERRITORY YOU WISH TO COVER.

MAKES THE ONLY SOLID, CLEAR, ROUND ICE CUBES ON THE MARKET TODAY (NO HOLES).

SANITARY — DEPENDABLE — STREAMLINED — COMPACT
WILL FIT UNDER ANY BAR. 200 LBS. PER DAY.

DIMENSIONS: 35" High; 24" Wide; 38" Long

COLD-TROL CO.

2600 EUCLID AVE. • CHERRY 1-3801
CLEVELAND 15, OHIO

FOGEL SALES HIT NEW HIGH; DEALERS CASHING IN ON EXCLUSIVE "YEARS-AHEAD" DESIGN, FEATURES

PITTSBURGH CASE SALES COMPANY

Fogel Refrigerator Co.
5400 Eadom St.
Philadelphia, Pa.

Att: Mr. Wm. Fogel, President.

Dear Mr. Fogel:

It was a pleasure to visit with you the other day and note the progress being made constantly by the Fogel Refrigerator Co. to apply new ideas and new methods toward a continually better value for the purchaser.

From a distributor's standpoint, the cooperation which you have always afforded us has been most helpful. When problems arise, as they do from time to time, we have always found Fogel pre-eminently interested in closely cooperating with us. The extra drive and push which a factory can afford a dealer is always forth-coming from you, and it is that extra degree of cooperation which makes for a happy relationship in every particular.

Yours truly,
WALTER R. BROWN
General Manager

DISTRIBUTOR CITES HELPFUL FOGEL AID

Walter R. Brown, general manager of the Pittsburgh Case Sales Company, highlights some of the advantages of a Fogel franchise in his letter to Wm. Fogel, president of the Fogel Refrigerator Co., which states in part, "From a distributor's standpoint, the cooperation which you have always afforded us has been most helpful. When problems arise, we have always found Fogel pre-eminently interested in closely cooperating with us. The extra drive and push which a factory can afford is always forthcoming from you. . . ."

Fogel management and factory field representatives always maintain close personal contact that helps dealers and distributors solve problems and close sales. It is such cooperation that has helped Pittsburgh Case Sales Co. enjoy steady growth during the past 20 years as a Fogel distributor.

Completeness of New Fogel Line Meets Requirements of Independent Grocers, Meat Markets, Supers, Bars, Restaurants, Luncheonettes, Institutions

FOGEL LINE PRICED TO CLINCH SALES; BACKED BY NATIONAL ADVERTISING

For over half a century the Fogel name has stood for leadership in commercial refrigeration engineering, design and workmanship. Yet, the Fogel line is priced to enable dealers and distributors to compete successfully with any line on the market. The advance styling and built-in quality of Fogel cabinets are "plus features" that produce extra sales. Today, the Fogel Refrigerator Co. is engaged in an intense national advertising campaign directed at the retailer using the leading publications in the trade. Inquiries are constantly being received by the home office and are immediately forwarded to the nearest franchised Fogel dealer.

The introduction of the new Fogel line presents new "years-ahead" design in many models of commercial refrigeration.

Every model has been designed from a standpoint of eye-appeal, extra visibility, greater display, and more profitable retail merchandising.

Improved methods of refrigeration keep foods looking fresher, more tempting—yet operate at lower cost.

The Fogel line offers the dealer and distributor a complete line with unlimited sales opportunities among every user of commercial refrigeration.

Fogel exclusive Angle-Vision, brilliant fluorescent flood lighting, temperature and humidity control, and add-a-case construction are among the Fogel features that are important "buying" features to every retailer.

The models illustrated on this page represent only a part of the complete Fogel line.

NO 'KICKING AROUND' FOR FOGEL FRANCHISED DEALERS, DISTRIBUTORS

FOGEL MERCHANDISERS INCREASE RETAIL SALES UP TO 300%

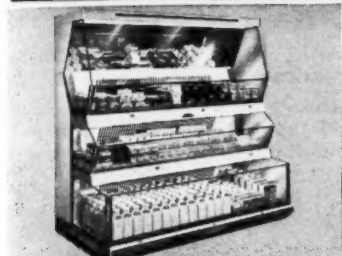
Food stores which have already received installations of the new Fogel open self-service and angle-vision merchandisers are reporting retail sales increases up to 300%. From a standpoint of open self-service selling at lower overhead, this represents an immense profit increase to the retailer. Some of the features responsible for such retail sales increases are easy-reach of every item in the display, store-wide visibility of the display from almost any angle, and Fogel refrigeration that keeps foods at their sales-tempting peak.

Exclusive Protected Territories; No 'Back Door' Deals

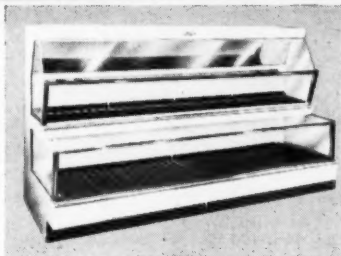
A Fogel exclusive franchise means what it says—exclusive Fogel representation in a given area. Every case sold in that territory is sold only through the franchised dealer or distributor even though it is a "wholesale size" order to a frozen food processor, made as a result of a factory inquiry. Above-board dealings of the Fogel company with its dealers and distributors is one of the cornerstones on which the company was founded and on which it continues to grow.

OPEN SELF-SERVICE MERCHANDISERS

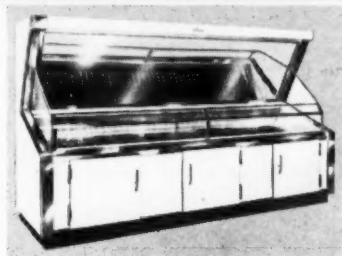
Add-A-Case Construction . . . Removable Ends



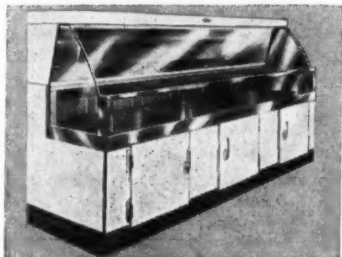
DCO-6: Three refrigerated decks; individual coils for each deck; glass sides for side view vision; 6 ft. lengths.



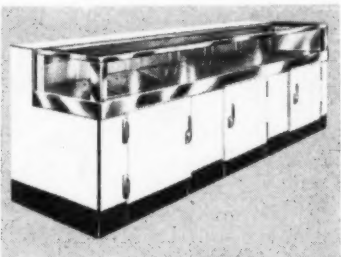
DC2-8: Combination case; each deck with individual coiling; thermopane front; 8 ft. lengths.



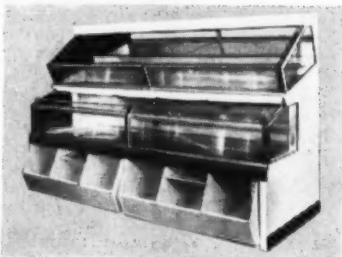
WC-10DD: Extra high, extra wide for mass display; positive cold air circulation dual circulators; 10 ft. lengths; 72" high, 42" deep.



VCO-10DD: All-purpose self-service merchandiser; Fogelaire dual circulators; 10 ft. lengths; 35" deep; easy entrance through store doors.

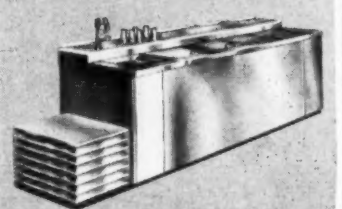


VCO-10LC: Same as VCO-10DD, less canopy for island display or servicing from rear; ideal for self-service meat case.



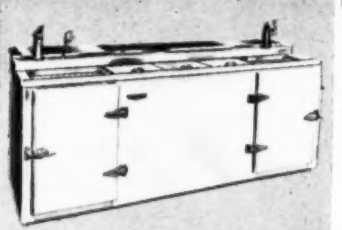
OV: Combination refrigerated case; lower bins for dry storage; solves space problem for small stores; 6, 8, and 10 ft. lengths.

BEVERAGE COOLER



Stainless steel dry storage bottled beverage cooler; stainless drain-board top; 23 to 44 case capacity; unitized or remote.

CLUB BAR



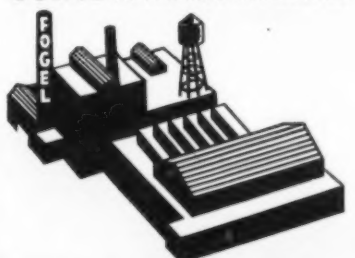
Stainless steel bar—combination draught beer and bottle cooler; available in 2 to 5 keg capacity complete with tops and fittings; unitized or remote.

SECTIONAL WALK-IN



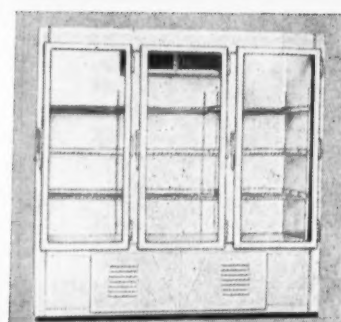
Standard and low temperature; aluminum clad; also in stainless or white finish; any size can be made from 2 and 4 ft. Add-A-Sections.

Modern 4 Acre Plant Geared to Mass Production

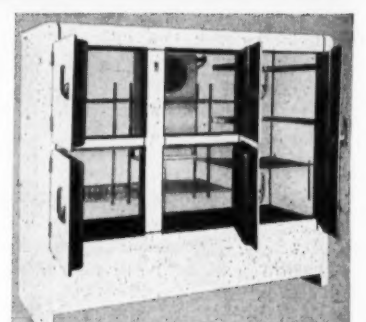


CABLE ADDRESS: FOREFCO

REACH-IN REFRIGERATORS; DOUGH RETARDERS



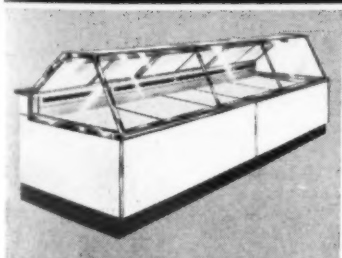
SERVUE: Reach-in refrigerators in 24, 40, and 80 cu. ft. capacity; thermopane display; highly polished metal, narrow mullion frame gives maximum vision and utility.



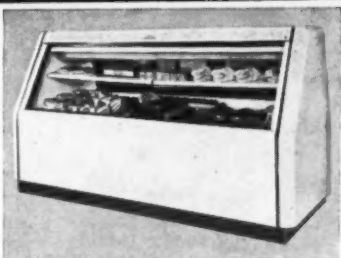
MODEL R: Reach-in refrigerator; 20 to 57 cu. ft. capacity self-contained; up to 80 cu. ft. remote; stainless steel, baked enamel or porcelain.

STANDARD DOUBLE AND SINGLE DUTY PORCELAIN DISPLAY CASES

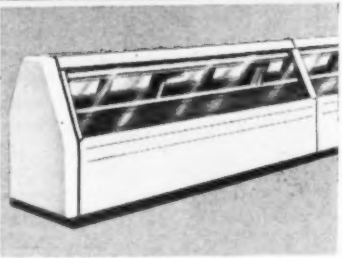
All Models Available Unitized or with Condensing Unit Ready for Plug-In Operation



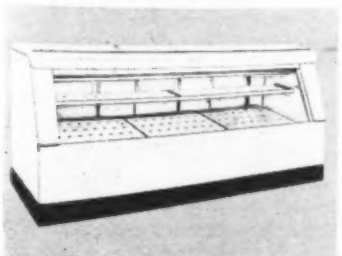
GG: All-Vision continuous display merchandiser; top display and double duty for meats, fish, poultry; standard lengths; 40" deep, 50" high.



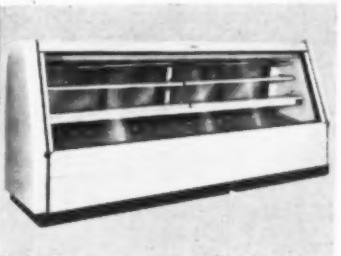
"CHAMPION SERIES": Double duty porcelain display case; porcelain platter shelves; standard lengths; 50" high; 34" deep.



MC: Porcelain continuous top display meat case; add-a-case construction; accommodates 30" platters; 8, 10, and 12 ft. lengths.



4300: Counter-height porcelain double-duty display case; standard lengths; 43" high.



5003: Porcelain 3-shelf double-duty with extra wide display glasses; 6, 8, 10 ft. lengths; 34" deep, 50" high.



BM: Triple-duty luncheonette case; refrigerated top equipped with solid pan inserts and sandwich cutting board; 4 and 6 ft. lengths.

Dealers! Distributors! Show me!

FOGEL REFRIGERATOR CO.

Gentlemen:

Show me the facts—I want to know how a Fogel Exclusive Franchise can give me increased sales opportunities and greater profits.

(No obligation—just sign, clip to your letterhead and mail today)

Name

FOGEL
REFRIGERATOR COMPANY
5500 EADOM STREET, PHILADELPHIA 37, PA., U. S. A.

Data on New Kelvinator Appliance Line--

(Concluded from Page 1, Column 4) cabinets in the popular long door "cold-clear-to-the-floor" series. A new wiring system has been added on all standard-size cabinets 8 cu. ft. and larger, to accommodate another innovation, a thermostatically-controlled

butter chest, available as an accessory, which plugs into an electrical outlet inside the refrigerator.

Other new features include extra crispers, redesigned shelves, a new type of door handle, and new "Strato-Blue" trim.

Model Designation	Storage Capacity	Other Features
TM	11.9 cu. ft.	Two-door full-length cold, twin controls, "humidplate."
HM	10.9 cu. ft.	Full-length door, cross-top freezer.
SM	11.9 cu. ft.	Full-length door, side evaporator.
DR	7.9 cu. ft.	Cross-top freezer, 42½-lb. capacity.
HR	8.0 cu. ft.	Cross-top freezer, 33-lb. capacity.
SR	8.6 cu. ft.	Side evaporator.
AH	7.1 cu. ft.	Full-length door, 24-in. wide cabinet, cross-top freezer.
AS	7.6 cu. ft.	Full-length door, 24-in. cabinet, side evaporator.

Model TM is a two-door, combination refrigerator-freezer, with approximately 12 cu. ft. of storage space in a cabinet 31½ in. wide, 28½ in. deep, and 64½ in. high. Maximum refrigerated storage capacity is achieved through the "cold-clear-to-the-floor" cabinet design pioneered by Kelvinator.

The TM's upper compartment is a fully-insulated, full-width freezer chest, which stores up to 70 lbs. of frozen foods and ice cubes. A dial in the top trim of the upper door opening controls zero-range temperatures in the freezer chest without affecting temperatures in the lower compartment. The lower compartment has its own separate control dial on the left wall of the cabinet interior, which regulates moisture as

well as temperature.

The "humidplate," a refrigerated sheet of chrome-plated copper, is mounted on the rear wall of the lower "moist-cold" compartment. It operates at a slightly lower temperature than the refrigerated walls, and collects excess moisture from the air. The control dial can be set so that any frost on the humidplate melts off during periods when the refrigerator mechanism is not running.

In addition to the humidplate, the lower food storage compartment also is cooled by refrigeration coils in the compartment walls. Control of both moisture and temperature makes this compartment suitable for storage of dairy products and other foods of moderate to high moisture content, without loss of natural moisture, and

without transfer of flavors, the company claims.

Full-length-door models in the standard 31-in. cabinet width are the 11-cu. ft. HM, with a 42½-lb. capacity full-width frozen food chest, and the 12-cu. ft. model SM, with a side-mounted frozen food chest.

The HM features a full-width insulated baffle mounted below the frozen food chest, equipped at the rear with openings or "ports" covered by an adjustable slide. The ports may be opened to increase air circulation between the lower food storage shelves and the frozen food chest, or closed to restrict circulation, as cooling requirements or humidity conditions warrant. The front section of the baffle may be used for short-term storage of frozen meats and extra ice cubes.

Model SM is a 12-cu. ft. refrigerator that occupies the same floor space as old-style "sixes." It is equipped with a 38-lb. capacity, side-mounted freezer, and a molded white polystyrene meat tray mounted below the frozen food chest.

Including the TM, all three of these "cold-clear-to-the-floor" refrigerators are equipped with a sliding bushel-capacity "super-crisper," a clear polystyrene covered "handi-tray" for storing up to eight quarts of fruits, vegetables, or salad greens, and aluminum ice cube trays with a cube release lever which "rocks" cubes out over the sides of the trays.

Other models in the 31-in. cabinet size are three 8-cu. ft. refrigerators. Model DR is equipped with a 42½-lb. capacity, full-width freezer with drop door, and insulated baffle with ports. Model HR has a 33-lb. capacity, full-width freezer with divided doors, and insulated baffle with a two-position opening at the rear for humidity

control. Model SR has a 31½-lb. capacity, side-mounted frozen food chest with separate meat tray. All three are equipped with two 12-qt. covered crispers.

All 31-in. cabinet models, 8 cu. ft. and larger, have been specially wired to accommodate a thermostatically-controlled 5-lb. capacity butter chest, which is available as an accessory. The chest may be plugged into an electrical outlet inside the refrigerator cabinet for storage, and may be removed for use on the table when needed.

New full-length-door additions to the line are the small-kitchen models AH and AS. These models provide more than 7 cu. ft. of refrigerated food storage capacity in cabinets only 2 ft. wide.

Model AH also features a full-width insulated baffle with a two-position opening at the rear for cooling and humidity control.

Model AS is equipped with a 25-lb. capacity side-mounted frozen food chest. Both "sevens" feature a deluxe, 18½-qt. full-width crisper.

New Strato-Blue interior trim is employed for additional beauty

throughout the line. All eight refrigerators have acid and chip-resistant titanium porcelain enamel interior finish, leveling screws on the front cabinet legs, new latch and exterior styling, and adjustable shelves.

The seven models in the new electric range line offer the broadest selection of features in Kelvinator's history, says H. A. Willis, range sales manager.

"Width of the standard size series has been increased from 39 to 40 in.," Willis said. "Ovens are larger and faster heating; all surface units have greater speed and accurate selectivity; the 'rocket' surface unit is the fastest yet devised. New baffles have been designed for the new, larger ovens to assure the even heat distribution necessary for best baking results; bright reflectors in the ovens intensify heat radiation during broiling; cooking controls have been concentrated at the right side of the control panel, away from the surface units; and 'colormatic' controls show lights which change color for each of the seven heats which the surface units can produce."

Model Designation	Size	Features
ER-9D	40 in.	Double oven, "colormatic" controls.
ER-9	40 in.	Single oven, "colormatic" controls.
ER-7	40 in.	Single oven, automatic controls.
ER-3	40 in.	Single oven, automatic controls as accessories.
ER-2	40 in.	Single oven.
ER-14	21 in.	Apartment size, four surface units.
ER-1	21 in.	Apartment size, three surface units.

Kelvinator's 1951 freezer models include the four most popular sizes as proved by current consumer buying, according to F. E. Howell, Kelvinator freezer sales manager. All are chest type.

New features include a shielded floodlight which goes on automatically when the freezer lid is raised; relocated temperature control for easier accessibility; and a new three-shelf storage basket called a "pastrirack," with one open side, which makes possible convenient, safe storage of pastries, baked goods, and other small items.

Model Designation	Size	Approximate Capacity
FR-63	6.0 cu. ft.	210 lbs.
FR-93	9.4 cu. ft.	325 lbs.
FR-133	12.9 cu. ft.	450 lbs.
FR-203	20.0 cu. ft.	700 lbs.

Prices of the new models, as released to zones and distributors in October and November so that initial shipments could begin, are as follows:

Suggested retail refrigerator prices (including 5-year warranty and excise tax):

Model	Suggested Price
AS	\$224.95
AH	244.95

SR	254.95
HR	274.95
DR	299.95
SM	329.95
HM	369.95
TM	489.95

Following are suggested retail prices (including warranty and tax) on three models for the apartment house and new home building market:

AB	\$209.95
AC	209.95
AA	219.95

Following are suggested electric range retail prices:

ER-1	\$164.95
ER-14	174.95
ER-2	199.95
ER-3	219.95
ER-7	309.95
ER-9	339.95
ER-9D	389.95

Prices on the new freezer models, showing excise tax separately, are as follows:

Model	Suggested Price	Tax	Total
FR-63	\$259.95	\$13.40	\$273.35
FR-93	349.95	17.70	367.65
FR-133	399.95	20.05	420.00
FR-203	569.95	28.60	598.55

ADVANCE TOOLING overcomes "DOUBLE TROUBLE"

New Tooling Method by ADVANCE
Solves Tough Stamping Problem



Former methods of stamping double sump sinks were complicated and costly. Each half was drawn separately, then butt welded together to form a complete double-well sink. This method presented two major difficulties...

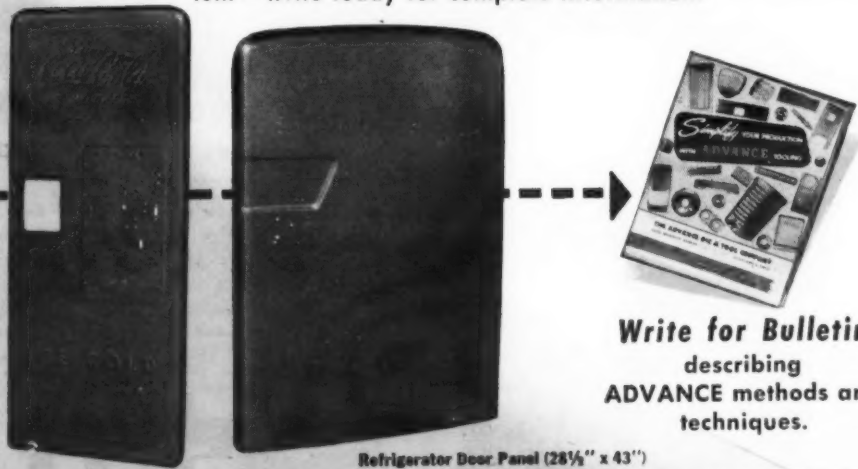
TROUBLE NO. 1 In addition to processing two separate parts, extra time and labor was required to trim, butt weld, and finish welding seam—greatly increasing the cost of the piece.

TROUBLE NO. 2 The welded seam always caused headaches after enameling. Enamel chipped off during production, in the warehouse, and often in the field where the full sales price of the product became a total loss.

Tooling for medium and large difficult stampings, like the ones shown, is ADVANCE's specialty. Complete try-out facilities for large parts are available—saving you valuable production time on your presses. Our competent engineering department and complete plant facilities are ready to help you at any time.

ADVANCE engineers developed an entirely new method of deep drawing both wells of this double sump sink from a single enamel sheet. Saving time and money, this outstanding ADVANCE tooling method eliminates welding and troublesome strains in the stamping—leaving it in perfect condition for enameling.

This is typical of ingenious and progressive ADVANCE techniques—which can help you reduce your production costs and simplify your stamping operations. We have the experience, engineering skill and mechanical facilities to meet your tooling requirements. Consult us on your problem—write today for complete information.



Automatic Dispenser Front (24½" x 61")

Refrigerator Door Panel (28½" x 43")

Write for Bulletin
describing
ADVANCE methods and
techniques.

ADVANCE DIE & TOOL CO.
6800 MADISON AVENUE CLEVELAND 2, OHIO

PHONE: WO 63191

Philco's '51 Line--

(Concluded from Page 1, Column 2) the wall; it is frozen on the evaporator and eliminated daily by the Philco automatic defrost system," Kennally stated.

Featured among the 11 new electric refrigerators are three two-door models, each a combination refrigerator and freezer with automatic defrosting. Sizes are 12.1, 10.2, and 8.2 cu. ft.

Other models are of 13, 11, and 9-cu. ft. sizes.

Practically all the 1951 ranges, including the small apartment-size, model, provide the "broil-under-glass" oven feature previously introduced by Philco. Another new feature is "cooking by color," since the oven and surface unit controls show various colors depending on the heating speed selected.

There are eight new Philco ranges, six of the standard size and two smaller models.

There are four 1951 Philco room conditioner models featuring adjustable grilles which not only deflect the air towards the ceiling or the floor, but also to either side if desired. The line includes two window-sill models, plus one air-cooled console and one water-cooled console.

Two chest-type freezers, a new model with 8.1-cu. ft. capacity and a 12.5 model, are included in the 1951 line of home freezers.

More complete details will be published in next week's issue of the NEWS.

New Tampa Store Conditioned

TAMPA, Fla.—Air conditioned, a new super food department store has been opened at 715 Bird St. by the Table Supply Food Stores.

Amana To Show Freezer--

(Concluded from Page 1, Column 5) whose customers are asking for increasingly greater freezing and storage capacity. A recent survey revealed that 94% of freezer owners regretted not having bought a large size, it was stated.

Amana's new model will hold 840 lbs. of food, it is stated, with a minimum of floor space. The floor dimensions are 48½ in. wide, by 39 in. deep.

Included in the new model are the advertised features of other Amana upright models: "See-Level" visibility, maximum surface sharp freezing shelves, refrigerated ceiling and liner. The model carries a 5-year food spoilage protection plan as well as a 5-year warranty on the hermetic refrigeration systems.

Some 200 Amana distributors were scheduled to attend the sales conference. Principal speakers were to include George C. Foerster, general manager; E. L. Hinchliff, sales manager; Merlin E. Morris, advertising manager; and Miss Frances Duncan, head Amana home economist, who was to describe a typical Amana home economist demonstration.

Maury Bergman, president of Maury, Lee and Marshall, advertising agency, was to outline the freezer firm's advertising plans for the year ahead.

James Mfg. Names Distributor

NEW YORK CITY—Dale Distributors here will distribute the James automatic dishwasher in the New York metropolitan area and Connecticut, it was announced recently. The unit is manufactured by the James Mfg. Co. of Independence, Kansas.

Army Decentralizes Negotiation of Supplies, Contracts

WASHINGTON, D. C.—The proclamation of a national emergency has resulted in some changes in Army procurement procedures, particularly in the matter of emphasis on negotiated bids, but the Army's decentralized purchasing offices located throughout the U. S. will continue to handle all Army procurement, according to Under Secretary of the Army Archibald S. Alexander.

"Even though most contracts for Army procurement will now be negotiated, the negotiations will be done at the decentralized purchasing offices," Alexander said. "Industrialists who wish to sell to the Army have no more reason for coming to Washington to accomplish their business than they had before."

Major part of Army procurement, since the emergency proclamation, is to be handled on a negotiated contract basis rather than the advertised bid procedure that has been used almost entirely heretofore.

Under negotiated contract procurement the Army purchasing office normally invites qualified suppliers to submit quotations accompanied by estimated production costs. Each supplier whose proposal is low enough to be considered is then ordinarily invited to separate conferences at which purchasing officers endeavor to secure the best possible contract, taking into account quality, delivery, price, and other contract terms.

Changes in procurement procedures will not involve any changes in procurement channels because the Army has decentralized its procurement to many purchasing offices throughout the United States, each responsible for purchasing certain classes of commodities. Suppliers who have been on lists for advertised bids will also be on lists for negotiated contracts. Thus they will continue to do business with the same purchasing offices as heretofore.

The system of advertising for bids will continue to be used in the purchase of many items, particularly standard consumer goods.

Heat-X-Changer Rolls Back Prices To Dec. 1

NEW YORK CITY—The Heat-X-Changer Co., Inc., has rolled back its prices to the Dec. 1 level "in cooperation with the request of the ESA for voluntary price control."

However, the company said in a letter to customers, "if our material costs continue to increase it will be necessary for us to again review our prices."

The action means, it was explained, "that our Price Sheet No. 106, dated Dec. 12, is cancelled and all of our products will be sold at prices shown on Price Sheet No. 105 dated Dec. 1. Invoices dated Dec. 22 and on will reflect the rollback."

The company said it will automatically issue credit cancelling the Dec. 12 increase on all sales made between that date and Dec. 22.

"We would like to point out," the letter stated, "that as of this date (Dec. 27), we have not received a price reduction from our suppliers of refrigeration controls and stainless tubing to cancel their increases which made it necessary for us to increase our prices on Dec. 12."

"Unless these suppliers cancel their price increases, we will therefore be saddled with the difference. We are taking this step, however, in order to cooperate to the fullest, in the hopes that the voluntary rollback system will work," the company statement concluded.

Fear of Shortages Booms Appliances In Oklahoma

TULSA, Okla.—Christmas shoppers, with an eye toward future shortages, made a run on washing machines, electric stoves, refrigerators, and TV sets in this area with sales showing increases better than 10% above last December and some as high as 18%.

Several store officials said the declaration of a national emergency has prompted the buying upswing. Many customers were hesitant about buying the higher priced items before President Truman's announcement.

16-Cu. Ft. Freezer Is Best Seller In Rural Wisconsin

MADISON, Wis.—A study of the sales of farm freezers by rural salesmen of Wisconsin Power & Light Co. during the first 11 months of 1950 showed the 16-cu. ft. size well in the lead with 52.3%.

Next biggest seller was the 18-cu. ft. freezer, which was purchased by 34.3% of the rural customers. Other

OOPS!

Marlo Price Increase on Copper Coils Was 16%

ST. LOUIS—Increase in prices of Marlo Coil Co.'s coils fabricated with copper tubes and copper fins, which was announced in November, was 16%, and not "a range of 16-28%" as was reported previously in the columns of the NEWS.

Marlo company officials emphasized that the fact that the increase applied only to coils fabricated with copper tubes and copper fins.

sizes were well below the first two as follows: 14 cu. ft., 7.6%; 24 cu. ft., 5.4%; 30 cu. ft., 4%.

About half as many milk coolers as freezers were sold, with the 6-can unit being the most popular (46.9%). The other sizes fared this way: 8-can, 29.9%; 4-can, 17.6%; 12-can, 5.6%. Trend in size of milk coolers is up.

Auto Service Industries Committee Mobilizes To Fight Federal Efforts To Ban Trade Discounts

DETROIT—For the purpose of fighting Federal Trade Commission efforts to abolish all trade or functional discounts except those based on actual cost differences, an industry-wide Automotive Service Industries Committee was established here recently.

Harold T. Halfpenny, legal counsel for the committee, announced its formation and gave these reasons:

1. Avowed intentions of FTC staff members to abolish all trade or functional discounts except those based on actual cost differences.

2. Activities of Federal Bureau of Investigation and FTC agents in demanding confidential business data from concerns against which no proceedings are pending.

3. The "anti-business attitude" of some Federal employees against the present highly competitive pattern of doing business.

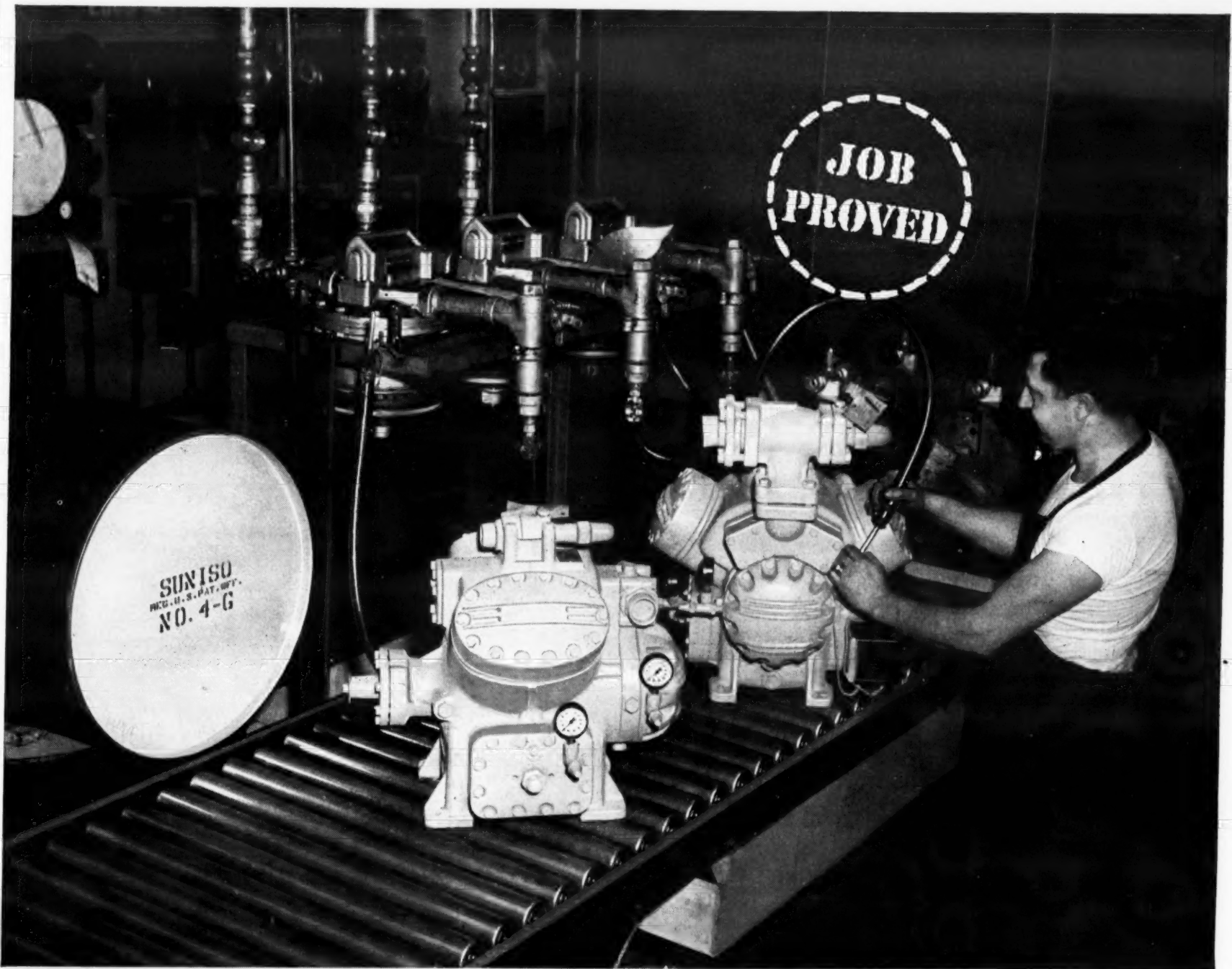
Attacking the "one price system," he said, has been advanced by FTC

staff members, Halfpenny declared.

"Government requirement of a one price policy by the manufacturer to all classes of trade, regardless of their function, will tend eventually to eliminate all wholesalers so that manufacturers, in order to continue their operation, would have to sell to retailers direct."

"It could ultimately mean that all retailing would be taken over by chains, mail-order houses, and cooperatives with sufficient capital to own their manufacturing plants."

Halfpenny pointed out that pending cases and investigations currently before the FTC question the legality of the historic methods of distribution. He added that independent firms and small suppliers in the automotive production, distribution, and service trades fear that precedents established by these cases might force many of such outlets to go out of business or merge with larger concerns.



SUNISO ENDS LOW-TEMPERATURE WAXING

Six Years' Service Experience Backs Up Manufacturer's Laboratory Findings

Important development six years ago was the large-scale shift to low-temperature units. Big problem for equipment makers, though, was finding a refrigeration oil that wouldn't wax at subzero temperatures.

Convinced that his present oil was "waxing out" at low temperatures, one prominent manufacturer of refrigeration and air conditioning compressors determined to test all available oils. Exhaustive labo-

ratory analyses soon narrowed the field to Suniso. Further tests proved beyond a doubt that when used with Freon, Suniso has a lower wax separation point than any other oil. As a result, the manufacturer has charged Suniso into the reciprocating and centrifugal compressors and smaller hermetic units for the past six years. There have been no reports of wax formation.

Because of unmatched service records like this, Suniso Oils are

the first choice of prominent manufacturers. All Suniso grades have extremely low pour points and low wax separation points. Also they have exceptionally high dielectric strength and high resistance to chemical change when mixed with Freon or any other modern refrigerant.

Profit by the experience of others. Get more information about non-waxing Suniso Oils from your jobber, or write Dept. RN-1.

SUN OIL COMPANY - Philadelphia 3, Pa.

In Canada: Sun Oil Company, Ltd.
Toronto and Montreal

SUNISO REFRIGERATION OILS

"JOB PROVED" THROUGHOUT THE INDUSTRY



Genuine Joe says...
"WAGNER BEARINGS
are BEST..."



Wagner's 87%
tin babbit-lined
bearings are best
because they
have:

1. Extreme load-carrying capacity.
2. Excellent anti-seizure properties.
3. High resistance to corrosion by acids present in oil.

355 49-10

Wagner Electric Corporation
8471 PLYMOUTH AVENUE, SAINT LOUIS 14, MO., U. S. A.

Clothes Drier Story: Survey Shows 350% Sales Rise In '50 With Market Saturation of Only 1%

CHICAGO—New dealer profit opportunities in selling clothes driers can be seen in the spectacular sales gains made in 1950. Shipments of 300,000 units represented a 350% increase over 1949. Further evidence that the drier is moving toward a considerably expanded market is the fact that 15 manufacturers are now competing for the business, compared with only three in 1941.

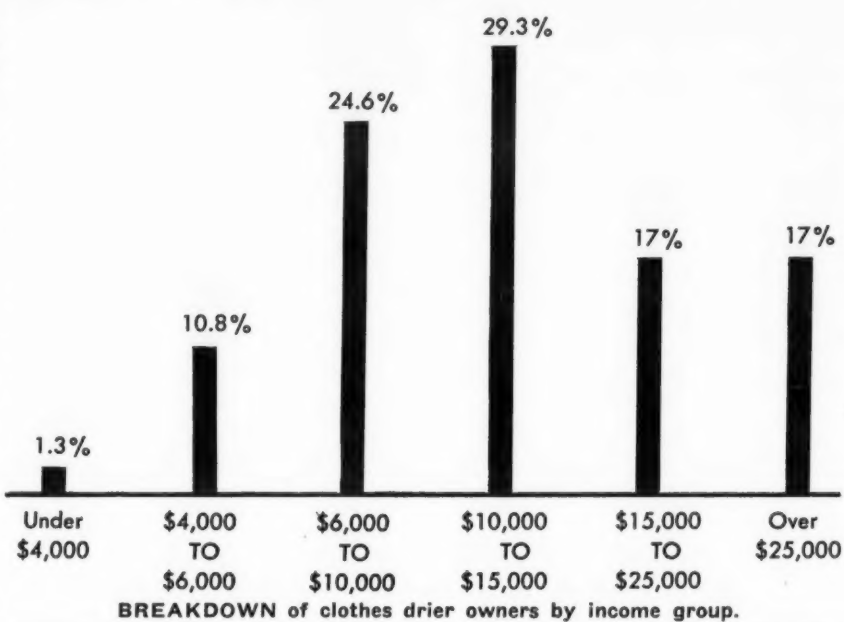
These facts were brought to light in a comprehensive market analysis and consumer survey conducted by Hotpoint, Inc., to learn new data on the potential market for driers, preparatory to introducing a moisture-free drier. The study also disclosed new information related to valuation of the consumer's home, cost of installation, population center in which the buyer lives, family laundry habits, and preferences for laundry location in the home.

Interpreting the survey, Edward R. Taylor, general sales manager, said that the new data indicates that the drier is making one of the fastest rates of growth of any postwar appliance. Wider acceptance will come from proved specialty selling methods by retailers, with the support of strong factory promotion.

80% ARE ELECTRIC

Despite the rapid growth of the drier industry since the war, market saturation is negligible. As of January, 1951, the total number in use is estimated at around 580,000, giving a saturation of approximately 1%. Electric drier sales have exceeded gas types since 1947, and today more than 80% of the business is electric.

From the standpoint of total annual sales, driers made one of the best showings in recent years, even when compared with well established appliances. In 1949, drier sales were up 10%, while refrigerator were off 6%; freezers, 30%; and ranges, 33%. In 1950, drier sales of 300,000 units were up more than 350% over the 1949 level. This was the sharpest increase by any appliance in 1950. As more housewives learn the



benefits of automatic washing machines, they will become increasingly responsive to the advantages of an automatic drier as a companion piece, he asserted. During 1949, drier ownership was 7.4% of automatic washer ownership, and in 1950, about 10%.

While the drier is closely related in function to the automatic washer, families using electric ranges or water heaters are also good immediate prospects because their homes already are wired for 220 volts. As with other low saturation appliances, however, installation does not become a major factor limiting sales until acceptance is better established.

MOISTURE PROBLEM OVERCOME

It is characteristic of low saturation appliances that the initial boost in acceptance is won through user endorsement. Automatic dishwashers have made wide gains in this respect, but driers have suffered some from complaints of moisture and lint given off in the room. The mechanical objections to former styles of tumbler driers now have been overcome with a machine that condenses the moisture from the electrically heated air and washes it into the laundry drain.

The official asserted that moisture-free driers are expected to expand the market appreciably, making housewives as conscious of home laundry planning as they are of scientifically designed kitchens. In the past, the basement has been the location preferred by most families, because it was least effected by moisture and lint given off in the room. With the moisture problem solved, the drier now can be placed anywhere in the house. Planning specialists now can turn their attention to locating the drier and other laundry appliances for greatest convenience.

A laundry that adjoins or is combined with the kitchen will prove to have many advantages. The elimi-

nation of stair climbing has been a strong factor influencing women in favor of the first floor. This is particularly true in large families where washing is done several times a week. The pleasant surroundings on the first floor and the accessibility of the laundry room to other household activities make a difference.

In two-story houses, a second floor laundry may become the most popular location. In houses with upstairs bedrooms, as much as 96% of the family wash comes from the second floor. While the second floor laundry is thought revolutionary by many

families, it may well become the standard home laundry of the future in two-story structures. A matched automatic laundry weighs approximately 600 lbs. which means no unusual structural problems for the builder or remodeler.

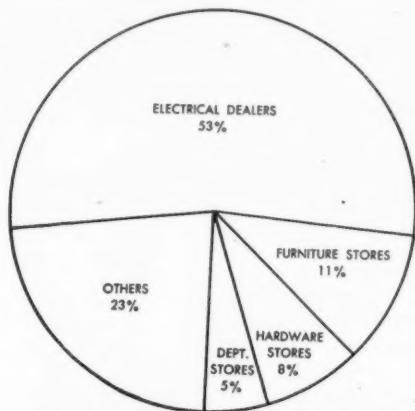
In basementless ranch-style houses which are enjoying wide popularity, the utility room is the logical location for the laundry. In farm homes, a first floor utility room is no innovation. The utility room doubles as a men's shower, a place to hang work clothes, a room for canning, or an overflow storage center. In suburban homes, it might be used as a sewing center with desk and household account files, or as a playroom for the children when they can't be outdoors.

Tabulations of consumer questionnaires indicate that electrical dealers are making about 53% of drier sales, with furniture stores accounting for 11%. Other types are hardware stores, 8%; and department stores, 5%.

The poll revealed that the bulk of buyers in 1951 fell in the middle income brackets (based on house valuation). This is in keeping with automatic washers, as opposed to automatic dishwashers which have their strongest appeal in the upper income ranks.

Tabulations made by Hotpoint indicated that approximately 65% of the purchasers in 1950 valued their homes at \$15,000 or less. A breakdown follows: Under \$4,000, 1.3%; \$4,000 to \$6,000, 10.8%; \$6,000 to \$10,000, 24.6%; \$10,000 to \$15,000, 29.3%; \$15,000 to \$25,000, 17%; and over \$25,000, 17%.

Most sales were made to consumers in metropolitan or suburban areas, with less than 10% to farm families. About 36% of the sales



BREAKDOWN of clothes drier sales by type of dealer.

were made by buyers in cities of more than 50,000 population; 26% in the 10,000 to 50,000 class; 18% in towns of 2,500 to 10,000; 12% under 2,500; and 8%, farm.

An interesting point of the survey was the per cent of buyers living in rented homes. About 98% of electric range sales were made to families owning their homes, while 14% of the driers, also requiring 220-volt wiring, went into rented homes.

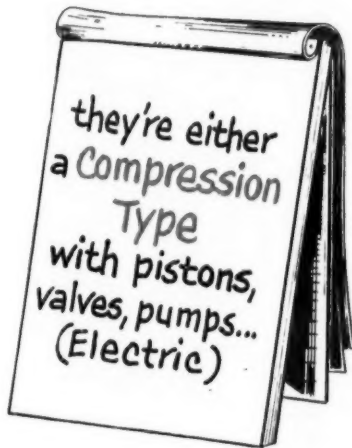
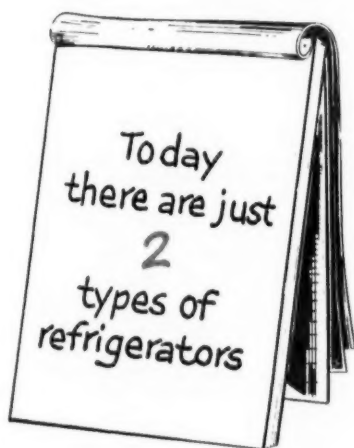
Corley W. Kirby Dies

CINCINNATI—Corley W. Kirby, assistant general sales manager of Crosley's eastern region, died in Cincinnati on Dec. 28, after an illness of several months. He was 56.

Kirby had been associated with Crosley division of Avco Mfg. Corp. since 1947. He joined the company as domestic sales manager and was later promoted to the post he held at the time of his death.

The "HIDDEN

LOOK HOW YOU CAN NET AT LEAST 11%



Stores More in Less Space... Cools Faster!

Speed-Freeze

bottle beverage coolers

write IDEAL COOLER CORPORATION
2953 EASTON AVE., ST. LOUIS 6, MO.

Lovely to Look at... So Wonderful to Own



"We've a supermarket at our fingertips—better food at bargain prices" say happy BEN-HUR Freezer owners. And the savings in food costs save the freezer cost in months.

Unique selling tools, the most effective in the industry, help BEN-HUR dealers to easy freezer sales records. Find out about this profit-opportunity!

BEN-HUR MFG. CO. • Dept. AC — 634 E. Keefe Avenue • Milwaukee 12, Wisconsin

BEN-HUR FARM and HOME FREEZERS

HEALTHFUL LIVING THROUGH FROZEN FOODS

Only **Servel**
The **GAS** Refrigerator
STAYS SILENT... LASTS LONGER

Only Servel has the
"HIDDEN HALF"

Troubled by Stiff Reg. W Terms?

This Dealer Claims There Are Still Plenty of Ways To Keep Appliances Moving

FT. WORTH, Tex.—It is stupid for the appliance retailer to allow himself to become discouraged and "licked" by the 25% down payment stipulated by government regulations on household refrigerator sales.

That's the way Vergal Bourland, head of Vergal Bourland Appliances, here feels.

"Discouragement over the big down payment is more in the mind of the salesman or dealer than in the public's mind," Bourland said. "The average housewife today is not concerned over the amount of the initial down payment."

"Statistics show that people have more actual money on hand today than in any time in the country's history, so the down payment is

not going to worry them greatly. People are going to keep on buying appliances even if they must scrimp a little to get the down payment together.

A practical answer to more stringent "Reg. W" terms is more intensified selling effort, Bourland feels. To implement this policy, he has devised a new form of salesman competition among the 24 specialty appliance men who staff his central Texas stores.

Under the plan, one of these salesmen is chosen "Man of Distinction" each week, the choice being based on his sales for the past seven days. As a reward for his standing, the "Man of Distinction" has a choice of three prizes, or, if he likes, his sales tally can be carried over toward

a more expensive prize later on.

In any event, the weekly winner is treated to a breakfast at a local hotel on the Monday morning after the results are tabulated and is given a "gold crown" to wear throughout that week.

The prize-winning entries are scored from a daily tabulation of sales listed with each salesman's name on a scoreboard hanging on the wall above a display of prizes. The fact that each man can see daily "where he stands" every day, provides a powerful stimulus toward getting out and making calls—rather than pouting over credit regulations, Bourland believes.

To make the contest more productive for the winners, both Bourland and a cooperating wholesaler put a

dollar in for each product sold above a certain cash value, and at the end of the contest, the winning salesman gets the accumulated money as an extra bonus. With 24 salesmen selling at top speed throughout the organization, this prize will be well worth extra effort, Bourland is convinced.

After the first month's campaign, results are excellent Bourland indicated.

"Our salesmen have found, as we believed, that the down payment increase doesn't hamper sales," he said. "In fact in many cases, salesmen haven't found it necessary to mention the amount at all until the signing of the credit contract, and seldom even then are objections raised by the customer."

Edgewater Steel Takes Over Plant, Assets Of Tracy Mfg. Co.

PITTSBURGH—Edgewater Steel Co. has announced acquisition of the name, plant, and substantially all of the other assets of Tracy Mfg. Co., producer of kitchen sinks and cabinets.

The Tracey plant is located along the Ohio River in Pittsburgh. Most of their buildings and equipment have been built and installed since 1946.

On Jan. 2, Edgewater started production against the present backlog of Tracy's orders and will continue to carry on and conduct the same type of business at the same location. No changes in basic products or distribution channels are contemplated.

Personnel of the Tracy organization will remain intact, except that Charles Wiener, who has been president of the company, is retiring from its activities.

The Tracy plant will be operated under the name of Tracy Mfg. Co., division of Edgewater Steel Co.

For the last 30 years, Edgewater's sales have been confined primarily to the railroad and other capital-goods industries.

New Delco Film Stresses Role of Motor In U.S. Life

DAYTON—A new 16 mm. sound film called "Motors on Parade" has been produced for Delco Products Div. of General Motors Corp. by the Jam Handy Organization.

The film, which has a running time of 26 minutes, is intended to serve two purposes, according to Delco: "To show the importance of the contribution of the electric motor to the home, farm, transportation, and industry, and to show how electric motors are made on a mass production basis."

Star of the motion picture is Parker Fennelly, well known for his role as Titus Moody in the Fred Allen radio show "Allen's Alley." He narrates the Delco story while playing the role of "Old Timer."

The film is now available without charge to business firms, schools, and civic and professional groups. Delco will pay the necessary postage both ways.

A folder describing "Motors on Parade" in detail may be had on request.

Gibson Sales Highest In 73 Yrs.

GREENVILLE, Mich.—Gibson Refrigerator Co. has reported the heaviest sales volume in its 73 years in business during the year ended Sept. 30.

Net sales totaled \$56,690,719, a gain of 34.5% over the 1949 fiscal year, Charles J. Gibson, president, declared. Earnings amounted to \$5.17 per share.

tain. The advertisement carried a sketch of a high-pressure salesman using selling technique on a small boy. Copy read, in part:

"Hi there, boy! Say, that looks like real spending money . . . and all your own, I'll bet! And I'm just the man to tell you of a 'real buy' . . . look . . . read this . . . at the Big Rock Candy Mountain . . . all the candy you can carry home for a nickel."

"Mister, that sounds good . . . but I don't think so . . . you talk like the man who sold my Dad his 'big bargain' radio. Chances are I'll get stuck somewhere along the way . . . my Dad did."

"Just because your Dad got nipped it doesn't mean you will."

"Well, Mister, the man certainly did him on that radio . . . and plenty. Bought it at a special 'cut' price . . . and a big trade-in on the old howler . . . but Mister, did he pay for it afterwards?"

"Now look here, my boy, are you getting in on this big bargain or not . . . I'm not interested in hearing about your Father's troubles."

"That's just what the man said to my Dad. One night the radio started to fuss like a family of cats and Dad dialed through to the store for some service. Mister, they hardly knew him. Any reliable store would have taken care of the trouble immediately. Anyway, my Dad had to call in someone else to do the job . . . and it cost him plenty."

STORM AD

Calamity Hits Dealer, But He Makes the Best of It

ELMIRA, N. Y.—When a terrific windstorm hit the Elmira area recently, it blew out all the windows of Haesloop's Appliance Store, damaging a large stock of its merchandise.

To dispose of storm-damaged appliances, Haesloop's conducted a large "Storm Damage Sale," featuring price reductions up to 50%. Said a large newspaper advertisement breaking the sale:

"Out went the windows. In came the rain. Down went prices. The recent big wind and rainstorm blew out all the windows at Haesloop's. Our modern showrooms were a shambles of broken glass. Now all damage has been repaired."

"The big Storm Damage Sale we promised you is here. All appliances have been drastically reduced. You'll find the appliances you want, at the lowest prices in all of Haesloop's history."

How Canadian Appliance Group Is Using 'Parables' To Stimulate Dealer 'Patronage'

TORONTO, Ont., Can.—The Ontario Association of Radio and Appliance Dealers is sponsoring a series of institutional newspaper advertisements in the form of "Pocket-Book Parables," aimed at convincing consumers of the importance of doing business with reputable appliance dealers.

The advertisements carry the names and addresses of all association members, listed according to

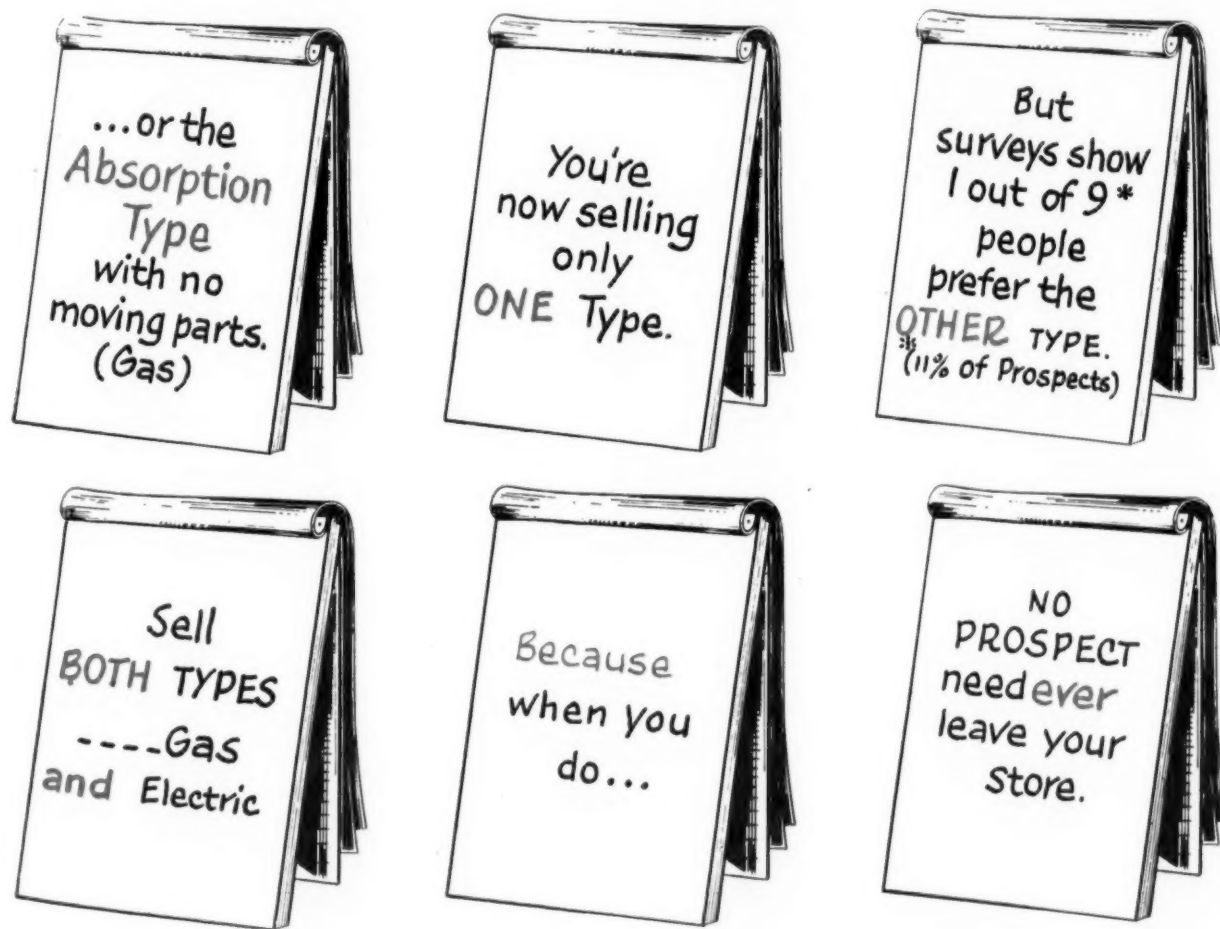
their locations in respective sections of the city.

"The dealers listed here stand back of every product they sell," says advertising copy. "Their guarantee of quality, integrity, and service assure you of full satisfaction long after the sale is made."

A typical Pocket-Book Parable presented in one of the series of advertisements was built around the tale of the Big Rock Candy Moun-

HALF"Story

MORE REFRIGERATOR BUSINESS IN 1951



Write or wire Servel, Inc., Evansville 20, Ind., for details

famous "motorless" freezing system...the that reveals true refrigerator value

YOUR BEST INSURANCE AGAINST EXPLOSION DANGER!

FINE "SEAMLESS" CYLINDERS

give maximum safety for only 3 cents a year! Cheapest insurance you can buy against explosion danger from cylinder overfilling! Their extra capacity . . . 4.8 lbs. compared to 4.0 ICC requirements . . . decreases high pressure due to hydrostatic expansion. Heavier metal walls, thicker at ends. No welded seams. Fusible safety provided as standard equipment. Spring loaded safety, slightly extra.

... Ask your Wholesaler about Fine's new 5 lb. cylinder No. 5E, stands erect!

Fine PRODUCTS CO. 185 NORTH WABASH AVENUE CHICAGO 1, ILLINOIS

YOU'LL PROFIT SELLING SUPER-COLD THE COMPLETE LINE OF FOOD STORE REFRIGERATION

Write for new liberal Distributor-dealer franchise agreement.

THE SUPER-COLD CORP.

1030 EAST FIFTY-NINTH STREET LOS ANGELES 26, CALIFORNIA





CASE IN WALL just outside Sky Chef restaurant is kept filled with fresh-looking entrees in order to attract attention of airplane passengers in hallway.



CASE IN RESTAURANT illustrates additional use of refrigeration by operators of the Sky Chef restaurant who claim patronage running to 3,500 per day.

Wall Case Helps Cafe Snag Patrons In Busy Airport Terminal

DENVER—One of the most unusual applications of food refrigeration in western restaurant history is luring a heavy volume of food service patrons into the new Sky Chef restaurant at the Denver Municipal Airport, here, according to John Mayer, general manager.

Much of the restaurant's current 3,500-per-day customer traffic is due to the refrigerated display which appears in the wall outside the first-floor coffee shop entrance.

"We operate on the theory that the sight of ready-to-cook meal entrees

kept under refrigeration right in the terminal, will whet appetites more effectively than any amount of printed menus," Mayer commented. "Even better than the sight of diners through the all-glass entrance to the coffee shop."

Used to keep these meal entrees under refrigeration is a small display case, flush in the wall and facing the busy terminal area near the ticket office and souvenir stands.

The case is 3 ft. by 2½ ft. by 22 in. A ½-hp. condensing unit provides circulating cold to keep the interior

evenly at 35°. Double Thermopane glass prevents the display case window from "fogging."

Frequently displayed in the eye-level case are roasts, steaks, chicken, seafoods, ready-made salads, desserts, rare cheeses, and even a few beverages—all brightly illuminated by a concealed cold cathode tube. The case is a natural "magnet" for the hundreds of passengers who stream through the terminal daily.

Often the sight of a choice two-inch-thick Kansas City Steak will make an airplane passenger decide to

eat while awaiting his plane, rather than dining en route, Mayer has found.

Foods are kept on display for only a few hours, and then replaced by new foods.

Netherlands Concern Seeks U.S. Machinery, Know-How

WASHINGTON, D. C.—Participation of an American firm in expansion of a plant for the manufacture of electrical household appliances is sought by a Netherlands concern, it was reported recently by the Office of International Trade, U. S. Department of Commerce.

The Netherlands firm is Electro-technische & Metaalwarenfabriek Rudolf Blik, N. V., of The Hague. It produces electrical cooking apparatus, stoves, water boilers, dishwashers, and washing machines.

The company wishes to collaborate with a U. S. manufacturer of component parts. Participation should be in the form of machinery and technical experience to a value of \$100,000 to \$200,000, rather than as liquid capital, according to the Netherlands concern.

Interested U. S. companies are invited to correspond directly with the firm at 38-44 Waldropstraat, The Hague, Netherlands.

Prospect Pick Up Service

ROCHESTER, N. Y.—Kennedy-Clark, Inc., 22 South Ave., staged a promotion on automatic washers by offering to send a car to the prospect's home, bring the prospect and her laundry to the store, wash and dry the laundry, and return the prospect home by car. Interested persons were invited to call the store and make an appointment at a convenient time.

New General Pay Boost Takes Effect at York

YORK, Pa.—A general pay increase of 5% across-the-board for hourly and salaried employees of York Corp. effective Jan. 1, was announced here by Stewart E. Lauer, president.

This is the third general increase granted York employees since June 5, 1950, making a total average increase of 11.9%. This figure does not include merit increases granted under the corporation's job evaluation plans.

"Increased volume of business and substantial gains in net earnings, made it possible for us to offer the raise at this time," Lauer explained.

Westinghouse Names Cleveland Distributor

CLEVELAND—The Sturtevant division of Westinghouse Electric Corp. has appointed Cleveland Air Conditioning Corp. as its distributor in the greater Cleveland area for its "Unitaire" line of packaged air conditioners.

Cleveland Air Conditioning Corp. is headed by Leonard F. Auerbach, veteran of many years in the air conditioning field. The company offices are located at 3030 Euclid Ave. The firm will specialize in industrial and commercial installations of air conditioning equipment.

Auerbach is a member of the Northern Ohio chapter of the American Society of Heating and Ventilating Engineers.

WE HAVE IT!

the only automatic ice cuber that makes round, clear, solid ice cubes

Sells for less than any other cuber!

For complete information write:

Loudon
MINNEAPOLIS

COMMERCIAL REFRIGERATION EQUIPMENT
2524—27th Avenue South Minneapolis, Minnesota

MR. PARTS JOBBER—

Have you any one item that sells a host of other units? If you can answer YES, then we know you are handling Motor Adapters: 1 to 3 hp.—103-C and we know also, they are selling motors, belts, pulleys, controls and other allied items for you.

Motor Adapter Corporation

4730 JOY ROAD
DETROIT 4, MICHIGAN

demand DETROIT CERTIFIED VALVES



683 also available in cast brass body with ¾" female N.P.T. inlet and outlet connections. (No. 685 Strainer available as an accessory.)

683 in forged brass body available with either flare (¾" S.A.E. for ¾" x ¼" Reducing Nut) or sweat (¾" or ½" O.D.) connections.

- ★ New plastic-imbedded water-proof coil.
- ★ Rugged forged brass body.
- ★ Large integral inlet strainer protects sweat and flare types.
- ★ Connections available for flare, sweat or pipe thread applications.
- ★ Sturdy mounting boss.



Eliminate Trouble

BEFORE IT STARTS WITH

DETROIT 683 SOLENOID VALVES!

One sure way to do your customers a favor is to install **DETROIT** 683 solenoid valves. You'll be doing yourself a favor, too, by positively eliminating the need for costly call-backs. Just check the outstanding features of the 683 and you'll see why. First, this remarkable valve is designed for adaptability

—three standard models available for flare, sweat or pipe thread connections. Add to this the water-proof construction, integral inlet strainer and "kick-off" spring for positive closure and you'll see that with the 683, trouble can't start because it can't get in! **DETROIT** solenoids are available in capacities from 3 to 20 tons Freon-12. So for replacement or new installation, demand **DETROIT** for the best in solenoid performance, service, economy!

DETROIT
LUBRICATOR COMPANY

5900 TRUMBULL AVE., DETROIT 8, MICHIGAN
Division of **AMERICAN RADIATOR & Standard Sanitary Corporation**
Canadian Representatives: **RAILWAY & ENGINEERING SPECIALTIES, LTD.**—Montreal, Toronto, Winnipeg



DETROIT HEATING AND REFRIGERATION CONTROLS • ENGINE SAFETY CONTROLS • FLOAT VALVES AND OIL BURNER EQUIPMENT • DETROIT EXPANSION VALVES AND REFRIGERATION ACCESSORIES • STATIONARY AND LOCOMOTIVE LUBRICATORS

LOOK HERE for Answers to Tomorrow's NEW Problems



Now that priorities, allocations, cut-backs, and other essential restrictions have returned to the industrial scene, the heating, ventilating, and air-conditioning picture is certain to undergo significant changes in the days to come—to pose new problems for contractors; distributors; dealers; and consulting, design and sales engineers associated with these fields. That is why attendance at this foremost Exposition of its kind—largest ever staged—takes on greater importance and timeliness than ever. The wealth of first-hand information available here on latest developments, newest trends, available equipment and supplies, and sources of supply, may prove to be an invaluable business asset for the uncertain times ahead.

Over 300 exhibitors with their technical representatives will be on hand to show and tell what the future offers for heating, ventilating and air conditioning in all types of commercial and public buildings, industrial plants, and homes. In no other way can so many helpful ideas and valuable contacts be obtained, and so much equipment seen and compared in so little time . . . all so essential to solving tomorrow's new problems.

So plan now to take advantage of this big opportunity. Note the dates.

Auspices of the American Society of Heating & Ventilating Engineers

Management International Exposition Company

Spotlight Attracts Prospects at Night

Michigan Store Draws Big Crowd on Foggy Night, Sells \$3,000 Worth of Merchandise Using Mobile Searchlight

By John O. Sweet and George M. Hanning

PORT HURON, Mich.—"It got the quickest results with the least amount of effort of any promotion I've ever tried."

The speaker was D. R. Shoffner, owner of Shoffner's appliance store here and a veteran dealer. He was talking about the "Spotlight Special" stunt which he conducted this fall as a part of the general promotion of the same name sponsored by Gibson Refrigerator Co.

The "gimmick" that made Shoffner's promotion so successful was the use of a mobile searchlight, which he stationed in front of the store. The dealer gave the searchlight most of the credit for attracting a crowd which bought \$3,000 worth of merchandise in three and a half hours on a foggy, chilly, threatening night.

Curiosity was the greatest motivating factor in bringing people to the store, Shoffner explained. Despite a low ceiling, the beam was seen for miles around. People from surrounding towns, as well as local residents, flocked to the store to find out what was going on.

"You'd be surprised how much attention that searchlight attracted," Shoffner commented.

HOW HE HANDLED PROMOTION

The dealer built up interest before the promotion with a newspaper advertisement urging readers to "watch for the spotlight in the sky tonight." Then he had "free gift" cards distributed to passing motorists when they stopped for the corner traffic light. And he had them put under windshield wipers on autos parked in lots and on the street.

("The next time I stage such a promotion, I'm going to take the cards to the factories and put them in the cars in the parking lots there," he remarked.)

As additional lures, Spotlight Special banners were strung across the front of the store and music was played over a public address system. Visitors who filled out the gift cards and brought them into the store were given measuring glasses.

The cards asked for the visitors name, address, and appliance interested in. Later, these cards were turned over to salesmen for follow up.

PROMOTION WAS INEXPENSIVE

"This was a very inexpensive promotion," he commented, "and yet it pulled a lot of trade in a short time. The \$3,000 in sales did not count any business from follow-ups."

Recently Shoffner attempted to drum up extra Christmas business by telephoning all person who had purchased a washer from him in the last year. He suggested an ironer or drier as a Christmas gift. If the prospect didn't seem interested in companion items to washers, the subject was switched to television sets. Where interest was aroused, a personal call was made on the prospect.

Shoffner reported that the plan "Worked pretty well."

Another recent promotion staged by the Pt. Huron retailer with some success was the "Four Star Free Days." A letter extending a "personal invitation" to attend a two-day special home appliance show was sent to all present and former customers.

Visitors to the store during "Free Days" received a free souvenir, free chances on 10 appliances, (two tickets

were enclosed with each letter), free food samples, and free merchandise. In addition, there was a "surprise bonus" for the first 100 visitors each day. Those who brought a friend got an "extra" free chance on the "big prize."

Another feature of the promotion was a special "two for one" deal. Demonstrations were conducted during the event by a home economist from the Detroit Edison Co.

Shoffner has found that the best means of expanding business is to follow up on sales.

We follow up all sales religiously to see that the buyer is getting the most use out of his appliances," he declared. "It's the salesman's obligation to do this, and I even threaten to withhold commissions from those who

don't do so. And it's a good method for discovering new prospects in the neighborhood."

Next March, Shoffner plans to conduct a special sale on trade-ins to get rid of an accumulated stock now stored on the second floor of the store. In the past, the dealer has rented most of his used appliances to tourists with summer cottages in the area. His fee was \$25 (\$10 for delivery and \$5 a month rent). But, he pointed out, many of the vacationers now bring their own appliances to the cottages.

Besides appliances, Shoffner also handles chinaware—a holdover from World War II days. He claimed to have had one of the largest stocks of china in this area, which kept customers coming to his store when appliances were unavailable.

Before-and-After Photos Of Kitchens Remodeled Help Dealer Sell

DALLAS—Investing \$100 for a flashgun-equipped press camera in order to photograph all kitchen installations "before and after" has proved to be a valuable move for Kessel's, appliance dealership here.

Milton Kessel, head of the firm, has found that elaborate water-color presentations, blueprints, sketches, etc., "don't mean a thing" to the prospective new-kitchen customer as compared to a black-and-white photograph which shows how an actual job is done.

"Women want to see the results in a way they can comprehend instantly," he declared. "Blueprints, sketches, drawings, etc., are not effective enough."

Kessel religiously photographs every kitchen installation the firm makes. If at all possible, a photograph is made of the kitchen "as was." This is blown up to an 8 by 10-in. size and mounted under a

plastic cover, awaiting receipt of a corresponding "as now" photograph.

The photograph combinations are particularly useful in the event that a new prospect lives in the same neighborhood where a kitchen has already been installed, Kessel has found.

"Most of the time we are following up prospects who have been suggested by a customer already sold," he indicated.

"When we show a photograph of this specific person's new kitchen, to a prospect living in the same area, the chances are that she already has been in the kitchen at some time or another. She can more readily appreciate the change."

"Thus, localized photography is particularly valuable, and we estimate that the purchase of the camera has repaid itself many times in the first two months that we have owned it."

Buffalo Firm Names Buyer

BUFFALO—Richard Pongo has been appointed buyer of appliances at J. N. Adam & Co., department store. He succeeds Thomas Cockerell who resigned recently.

Good Advice For Good Dealers



**DON'T SIGN ANY FRANCHISE
UNTIL YOU READ THIS BOOK**

Before you sign any major electric appliance franchise, you owe it to yourself to review "Opportunity Unlimited". In it you will find an interesting portrayal of all the advantages available to you in the Hotpoint Dealer's Franchise.

Nowhere else will you find an appliance franchise so replete with year 'round profit opportunities. Nowhere else will you find a retail sales philosophy so beneficial in profitably amplifying your major appliance markets. Nowhere else will you find an appliance line so complete—a line to fill the needs and demands of all your customers at all times.

Talk to your Hotpoint distributor now, and have him show you "Opportunity Unlimited". You'll discover you made a wise decision.



Switch to Hotpoint!

FOR FULL LINE LEADERSHIP

Hotpoint Inc.

RANGES • REFRIGERATORS • DISHWASHERS • DISPOSALS • WATER HEATERS • CABINETS
FOOD FREEZERS • AUTOMATIC WASHERS • CLOTHES DRYERS • ROTARY IRONERS

(A General Electric Affiliate)
5600 W. Taylor St., Chicago 44, Illinois



All Standard condenser coils have closely spaced fins which greatly increase the capacity. Sizes range from 1/4 to 5 h.p. A S M E approval is available on special order. Standard also manufactures a complete line of receivers.

Write for Bulletin SC-4

STANDARD REFRIGERATION CO.
332 S. Hoyne Ave., Chicago 12, Ill.



Frozen Foods, Freezers Seen as 'Front-Line Troops'

Fiocca of Revco, Reviews for NPA the Role These Industries Played In the Food Economy of Last War and What They Can Do Now

DEERFIELD, Mich.—An outline of the importance that the frozen food and home and farm freezer industries have to the nation in the present emergency has been drawn up by John A. Fiocca, territory manager in Akron, Ohio, for Revco, Inc., manufacturer of Chill Chest freezers.

Fiocca's treatise was intended as an appeal to the National Production Authority on behalf of these two industries. Fiocca contends that the home and farm freezer industry and the frozen food industry should get prime consideration as front-line troops on the "food front" and be permitted to continue to produce at present rates or even at increased rates.

Fiocca's presentation was released to the NEWS by Revco with permission to print excerpts of particular value to the industry.

Freezers as Important as Tanks and Guns

The appeal points out to the NPA that what the freezer industry produces is "as much a part of the nation's war effort as is the production of tanks and guns."

The author maintains that, in addition to preserving food, these industries achieve "enormous savings" in the use of steel, tin, manpower, transportation facilities, etc.

Harking back to the days of World War II, Fiocca painted this picture of the problem faced on the "food front."

"As anyone will attest who had to wait in line for the many rationed food stuffs during World War II, the production and preserving of foodstuffs on the home front was a project which soon made its seriousness felt among those in the know in Washington."

"In fact, so serious did the 'Food Problem' become, that it became a project holding 'top priority' in the nation's defense effort."

"How can we forget the great stress our leaders placed upon the so-called 'Victory Gardens' which each citizen was urged to grow in an effort to alleviate the serious food production and preservation problem?"

Food Shortages Began In 1942

"How many of us can forget the many food shortages existing even as early as 1942? Had it not been for the tremendous number of 'Victory Gardens,' our shortages would have been multiplied tenfold."

"We must never forget that as our nation's youth was called to the colors, leaving less and less to grow and preserve the nation's crops, that our larder became more bare by the day."

"We must not forget how the average farmer's hired hands fled to the city where high wages predominated, and how we were forced time and again to recall farmers' sons from the service to help bring in the harvest; nor the many times we had to enlist the services of servicemen in nearby camps to help gather and can the crops."

"We can't very well forget these dramas which unfolded themselves as the nation girded itself for all-out war in Europe. . . . We are faced with vaster problems today, and we must start to solve them immediately for time is of the essence. . . ."

"We know that should conflict come that manpower will be our most pronounced shortage. Our enemies outnumber us by the millions, not by only a hundred divisions as in World War II. . . ."

"This is all the more reason why we must conserve as many of our men as possible for active duty in the armed forces. In the past, we could well afford to send a small army of workers to reap the harvest, and can, and preserve the yield."

"From all indications, however, we may not be so fortunate this time. The enemy will not give us the opportunity. They will be after a quick knockout blow, and we will need the service of every able bodied American to fight. Our 'Food Front' being a lost cause in such an eventuality."

Fiocca then turned to the home freezer industry and gave this account of its brief history.

"Before the war there was little

John A. Fiocca, territory manager in Akron, Ohio for Revco, Inc., drew up an appeal to the National Production Authority on behalf of the frozen foods and home and farm freezer industries. In this presentation, parts of which are published here, Fiocca cites reasons why the allied industries should be allowed to continue at their present rate of production as an aid to the economy of this country in the emergency. His treatise includes a review of the part the two industries played during the food shortages of the last war.

market for home freezers to speak of, and very few manufacturers were making them. Freezers were little heard of and those few in use were owned by either the very well-to-do who could afford to have the best, or sportsmen who sought space for their game.

Mad Scramble for Freezers

"As the nation found itself in war, the full impact of food shortages and meat rationing made itself felt on the citizenry. Initial price no longer a prime obstacle to freezer ownership, a mad scramble for freezers ensued."

"Many even purchased reconditioned ice cream cabinets, or else made their own freezers at home. It was during this hectic era in our history that the full value of a home freezer made itself felt."

"As one person told another of the advantages such a zero storage cabinet offered, it soon became the open, if not secret ambition for each householder to own one for himself."

"Of course, like any other infant industry, there were many marginal manufacturers who entered the business as 'opportunists.' Many others failed to produce quality merchandise, and as a result the industry, which might have boasted as high as 350 individual firms after the war found itself barely surviving the war period when the nation's economy slowly began to return to normal."

"Of course, after the 'weeding out process' had been completed those who remained were, on the average, good, substantial, and honest establishments eager to serve faithfully the demands of the new industry."

"Today the home and farm freezer is a well-known and generally accepted major electrical appliance. Consumer research surveys have found that it is listed either first, second, or third in the individual householder's list of most wanted appliances."

Saves Up To 30% on Food Bill

"This prominence pays tribute to a freezer's well deserved place in the average home. It has gained this prominence of popularity because it has shown the housewife that it can save her up to 30% on her food bills, and at the same time give her family a dietary standard never before attained in this country."

"Naturally raising the dietary standard has also made for a more healthy family which is now enjoying more of the fruits of the nation's huge and varied larder at a ridiculously low cost per capita. . . ."

"When we stop to consider that a freezer is normally adequate for an entire family's use, we could suffice it to say that there are actually 1,250,000 families now using freezers of one type or another."

"This figure is growing by thousands each month as families throughout the nation buy freezers from their dealers."

"What does this mean in terms of the national economy?"

"Simply this: The more freezers placed in homes, the less acute becomes the problem of food storage; transportation of foodstuffs from one area to another; the need for canning with its inevitable demands upon steel and tin industries; seasonal foods no longer need be treated as such; waste becomes negligible since no food need be thrown away because of spoilage; the savings in time is tremendous since all baking for a month's period can be done at one time and stored; lunches can be stored for future use; buying of foodstuffs in wholesale lots at reduced prices aids our anti-inflation efforts, plus the fact that much more of the freezer's contents will come from the family garden; it is hoped that when enough home freezers are

is a major factor. . . . The savings in weight due to the use of paper or fiber containers is such as to have allowed the Illinois Central Railroad to use 14,000 lbs. less metal in the fabrication of special zero refrigerator cars."

Fiocca also pointed out that "based on American dietary standards there is food for only three-quarters of the world's population. Pre-war figures indicate that the world was never ahead of starvation by more than a 90-day food supply, except during the depression years when reserves mounted to about 180 days. In 1948, the reserve was down to about 30 to 50 days."

"Need more be said about the urgency of food conservation?"

Postwar Growth Was Rapid

Fiocca noted that the post-war growth of the frozen food industry has been amazingly rapid. He quoted figures from C. Courtney Seabrook, president of the National Association of Frozen Food Packers, to show that the annual pack of frozen fruits and vegetable rose from about 300,000,000 lbs. in 1941 to more than 750,000,000 lbs. in 1945, and 900,000,000 lbs. in 1946. He estimated that the 1950 pack would exceed 2,000,000,000 lbs.

Figures revealed at the National Frozen Food Industry Conference held in Chicago early in 1950 indicated that the year 1949 saw an increase of 38% in the tonnage consumption of frozen foods over 1948. An increase of 40 to 50% was expected for 1950.

Total sales volume for the industry in 1948 was \$350,000,000 and in 1949, \$460,000,000.

"The tremendous increase in frozen food consumption was in part

attributable to the increased number of home and farm freezers and combination refrigerator-freezer units in use throughout the nation," Fiocca commented.

"Another interesting fact was that wherever frozen foods were in high demand, one could be sure that freezer sales were also high. In other words, the sales of freezers complemented the sales of frozen foods. . . ."

Industries Grow Together

"We must face facts and admit that the growth of the frozen food industry will be in direct proportion to the growth of the home and farm freezer industry, for without adequate home facilities for 'zero storage,' frozen food consumers will buy only what they can use immediately, or save for a short time in their present refrigerators."

"This fact was more than proved by events following the war, when young, ambitious frozen food dealers attempted to dispense their goods in wholesale lots to customers who had no home storage facilities for them."

"As a result, we witnessed the sad decline and fall of what promised to have been a growing business. The obvious error of the dealers, as we now can see in retrospect, was in placing the cart ahead of the horse."

"The stockpiling program will undoubtedly hit the freezer industry and its use of scarce metals much sooner than the frozen food industry."

"To eliminate the freezer industry without the elimination of the frozen food industry would be sheer folly for reasons already given. To eliminate both is unthinkable."

"Our only solution is to allow both to continue as heretofore and perhaps increase the production capacity for both at the same time."

Really OUT OF THIS WORLD!

See for yourself the new 1951 NORGE LINE!

REFRIGERATORS • GAS RANGES • ELECTRIC RANGES
WASHING MACHINES • WATER HEATERS
HOME FREEZERS

THE LINE WITH THE SILVER LINING!

NORGE ...the

DOWN-TO-EARTH PRICES!

AT CHICAGO 5th Floor FURNITURE MART

JET PROMOTIONS

SKY-ROCKETING SALES!

'Long Deal' Gaffney Pulls Out All Stops on Promotions To Drum Up Appliance Business In Small City, 'Count the Dot' Contest Was Best

By John O. Sweet and George M. Hanning

PORT HURON, Mich. — A young man who claims to have "tried every promotion in the book" is Norman M. "Long Deal" Gaffney, owner of Gaffney's Appliance Store on Military Ave. here.

Always on the look-out for something new to try, Gaffney can look back on some very successful promotions. He is the first to admit, however, that even the best of them are not clicking too well at the moment—a fact he believes is due entirely to the critical international situation and its effect on prospective buyers.

Gaffney, who can be counted on to keep things moving promotion-wise, fondly recalls a Norge "Count the Dot" contest which he staged last spring.

Contestants were required to count the black dots splattered over a picture of a kitchen. The contestant who came closest to the correct total was given his choice of a Norge refrigerator, range, space heater, freezer, or water heater.

"We had terrific response to that contest," Gaffney recalled. "We received almost 5,000 entries, coming not only from Port Huron but from 95 other towns in this area."

"Our business doubled previous figures for three months after that. We sold more than \$40,000 worth of

appliances right here in the store the first month."

FOOTBALL CONTEST DRAWS

Another contest of more recent vintage that drew from 400 to 500 entries per week was a football forecasting contest. Gaffney printed up cards each week listing 20 college football games for that weekend. Contestants were required to mark the team they expected to win and turn in their forecast before noon on Saturday. The person correctly naming the most winners was awarded a prize.

To further capitalize on interest in football, Gaffney sponsored locally a weekly football forecast radio program, aired over the Mutual Broadcasting System. This was in addition to another radio show he sponsors locally—the Fulton Lewis, Jr., news commentary.

As might be expected, Gaffney is also a strong user of newspaper space to promote appliance and television sales. He claims to be the first independent dealer to take a whole five-page section in the newspaper. This was done on the occasion of his "open house" after remodeling the store last spring.

The huge spread was used to advertise bargains offered during the three-day special sale following the

open house. The first page of the section contained an invitation to the open house from the 13-man sales and service staff who were pictured in cartoon fashion.

As inducements to attend the open house, roses were offered to the ladies and cigars to the men. In addition there were a number of demonstrations, gifts, and prizes proffered to interest visitors.

Inside pages contained some editorial copy of the various features of the store and its services. One such service was a gift center where small appliances appropriate as birthday and anniversary gifts were displayed and would be gift wrapped.

AUTHORS NEWSPAPER COLUMN

As another means of inciting public interest in his store, Gaffney writes a short column called "Defrosting the News," which is published twice a week in the local newspaper.

Gaffney started the column two years ago using syndicated copy. Later he decided he could do as well as or better than the syndicated writer and started writing it himself.

He writes up humorous little items and comments on various local activities, tying in something about the store at the end. Typical of his "local" comments are the following:



"LONGER

DEALS" - MEAN - More For Your Trade-In!

WE WILL ALLOW YOU A LARGER ALLOWANCE ON YOUR OLD RANGE OR REFRIGERATOR ON ANY NEW MODEL!

CALL 2-2443 For Free Estimate & a Better Deal

GAFFNEY'S
APPLIANCE STORE

"The Television Store"

EYE-CATCHER: Advertisements such as these, although not large in size, command attention to Gaffney's Appliance Store in Port Huron, Mich.

"I wonder what happened to the gas rebate awarded to the City of Port Huron by the courts? Here's a tip—call one of your city commissioners. Hope your answer is better than the one I received."

"May I ask you 'my friend' to give the Optimist Club your support on their White Elephant Auction Sale. This swell gang of fellows known as 'Friend of the Boy' are asking you to give them any used household item, appliance, furniture, clothes, etc., for their sale. Call 2-3580 or 2-7241 for pickup. All proceeds go to projects for boys of the community."

Purpose of the column, according to Gaffney is to keep his name in front of the public. He signs each column and doesn't particularly care if what he writes antagonizes someone or not—so long as they remember his name.

JOINS MANY CIVIC GROUPS

There isn't really much excuse for anyone in Port Huron not knowing Gaffney, for, he says, he belongs to all of the civic organizations and is an officer in many of them.

Among the many other means of promotion that Gaffney uses are cooking schools frozen food schools, TV schools, congratulatory letters to newly-engaged and newly-married couples, bottle warmers for new mothers, special item offers to people of different outside communities who visit the store on a particular evening, and a coffee bar with free with free coffee and doughnuts (not such a good idea, Gaffney says).

Gaffney's retailing career started while he was still in high school here. He worked as a stockboy at Montgomery Ward's and at a dime store. After graduation, he joined J. C. Penney & Co. taking charge of basement sales in the local outlet.

Subsequently he served with Port Huron branches of two jewelry chains, Sears Roebuck, locally and in Chicago, and with Firestone at its headquarters and various branches.

He left Firestone to open his own appliance business here four and a half years ago. He now employs 19 persons including six salesmen.

The salesmen are also spurred on to greater efforts by contests such as the "World Series" type with new clothes offered to the winner.

DACHSHUND IS HIS TRADE-MARK

One of Gaffney's trade-marks is an elongated dachshund with his own head substituted for the dog's. This picture is used in connection with his nickname "Long Deal" Gaffney and the slogan "Dog-Gone Good Place to Deal." Copy explains that "long deals mean more for your trade-in."

In some advertisements, the dog alone is used with such comments as "your dollar always stretches at Gaffney's" and, with one picture showing the female dog feeding her pups, (in connection with a televi-



By NORM GAFFNEY

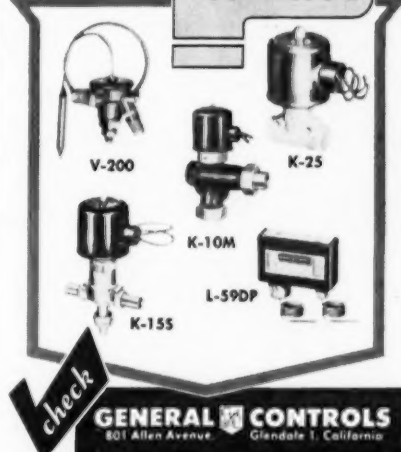
History spinning its web around a winter on a hot day, let's strike oil. In 1775, was the swimming in molasses. That be rolling or swimming. optometrist able to afford the new entertainment, Television, no find our sets very reasonably priced in for a demonstration at GAFFNEY'S TELEVISION SHOP, 921 Military. Phone: 2-2443. —Adv.

COLUMNIST: Norman Gaffney started this column two years ago using syndicated material. Object was and is to get his name constantly before the public. Now he devotes at least half of the column to local comment, letting the chips fall where they may.

sion advertisement) "gets terrific results on all channels."

Now, Gaffney is waiting for a friend, Robert K. Daniels, Kelvinator representative in this area, to present him with a puppy as promised. Then he is going to hold a big contest to name the new puppy!

need AUTOMATIC CONTROL



Manufacturers of Automatic Pressure, Temperature, Level and Flow Controls

FACTORY BRANCHES: Baltimore 5, Birmingham 3, Boston 16, Buffalo 3, Chicago 5, Cincinnati 2, Cleveland 15, Dallas 2, Denver 4, Detroit 21, Glendale 1, Houston 6, Kansas City 2, Minneapolis 2, Newark 6, New York 17, Philadelphia 23, Pittsburgh 22, St. Louis 3, San Francisco 7, Seattle 1, Tulsa 6, Washington 6. DISTRIBUTORS IN PRINCIPAL CITIES

SALES MANAGER

20 Years Diversified Refrigeration Sales Experience
2 Years Sales Manager for Nationally Prominent Firm
Personally Acquainted with Refrigeration Wholesalers, Manufacturers, and Larger Dealers from Coast to Coast
Registered Professional Engineer
Free to Travel Extensively if Required
Available February 1

BOX NO. 3642, AIR CONDITIONING & REFRIGERATION NEWS

**—THE GREATEST CAMPAIGN
IN NORGE HISTORY!**

NORGE TELEVISION! WEDNESDAY
NBC 8:00—9:00 P.M. E.S.T.

"4-STAR REVUE" with
★JIMMY DURANTE ★JACK CARSON
★ED WYNN ★DANNY THOMAS

**NORGE MAGAZINE
ADVERTISING!**

NORGE RADIO! —a terrific factory-paid spot campaign

**NORGE CO-OPERATIVE
ADVERTISING!**

50% MORE than ever before!

**NORGE TRAFFIC-
BUILDING PACKAGES!** sensational point of sale material that will channel the power of this big TV and radio promotion right into your display rooms!

line that delivers for the dealer!

AT CHICAGO 2nd Floor MERCHANDISE MART

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)
it, but do it; your friends and enemies will talk about it.—*Ensign News*. (Cape Town, South Africa).

Signs of the Times

Are we headed for further inflation? Columnist H. C. L. Jackson reports the following overheard-on-a-bus conversation between high school girls.

"You know what my family's doing? We've got a new electric roaster, and a new refrigerator, and a new dryer, and an electric washing machine, and a TV set."

"She paused to let this opulence sink into the envious minds of her listeners. Then she added, triumphantly:

"And, we're going to get a piano, too!"

"Out of the awed silence, one of the girls asked:

"Are you going to take lessons?"

"Oh, no. We can't afford piano lessons."

Out of Our Mailbag

H. G. Bogart Co.
Appliance Distributor
Toledo 4, Ohio

Editor:

Just finished reading a recent "Inside Dope" column of yours, and

can't resist sending you one of my favorite football stories.

This one concerns a dumb (but star) Ohio football player who was declared ineligible the day before the big game of the year.

The coach finally wangled an oral exam out of the physics professor who was responsible for the lad's plight.

The first question put to him was: "What is the boiling point of water?"

The player stumbled around trying to put his answer together, and finally came up with:

"The boiling point of water is when it begins to fuzz up."

We all love your stories and writings on politics and business.

"B"

President

The Readers Always Write

Sherer-Gillett Co.
Commercial Refrigeration
Marshall, Michigan

Editor:

Marshall (Michigan not Illinois) is a great little town. We go the even tenor of our ways—until you folks in the big town try to rob us of our all-too-few glorious hours.

Referring to "Inside Dope" in which you mentioned you'd dropped a pass back in the early '20's, it looks as though you have also tried to drop Marshall's (Michigan not Illinois) Homer Hazel from the National Football Hall of Fame.

If you dropped that pass in the years of 1923 or 1924, maybe those were great confusion years for you on many things—else how could you possibly credit one Nagurski with being the only player named to two

positions on an All-American football team? Of course, if the Bronc played both positions on the same team at the same time, why then we'll keep quiet.

Let's also keep in mind that Homer Hazel's nominations were made during the days when there was an All-American team rather than later when everyone who wanted to name one—did.

You also should know that Mr. Hazel made Ripley's column with a rather unusual touchdown.

J. H. WILSON,

Advertising Manager

P.S.: Here at Sherer we get a bang out of "Inside Dope's" stories. You know we read 'em when we can pick out a little old word like "only" which changed the whole meaning of the item.

P.P.S.: Homer Hazel of Marshall, Mich., is acclaimed to be the first man in the history of intercollegiate football competition to receive All-American recognition for two consecutive years for play at two positions on a football team. Called "Pop" by the fans after his junior year at Rutgers, because news of his marriage leaked out to the press, Mr. Hazel went on to set new records in football history.

He has been credited by the late Robert Ripley and many other notables as making the quickest touchdown in football. The time was 1924, and Rutgers was playing an old rival, Cornell university. Both teams were lined up on the field for "Pop" Hazel's kickoff. When he kicked the ball, which rested on a clay tee, he connected with a vicious boot and sent it end over end high above the gridiron.

Within seconds "Pop" roared down

to the other end of the field. He caught the ball as it bounced off of the Cornell safety man's chest, and ran it over the goal line for a touchdown. In 1923 "Pop" Hazel was named All-American end of the year and, in 1924, All-American fullback. He was one of the few players to make Walter Camp's last two All-American teams.

(Brother Wilson's good friend, we should add, is now employed as personnel manager of the Marshall, Mich., branch of the Eaton Mfg. Co.).

Koch Refrigerators

North Kansas City 16, Mo.

Editor:

One of these days Taylor Spink is going to get real mad at you for stealing his thunder. It used to be that I took the *Sporting News* down to the library with me every morning for my regular course of study. Now I have to read AIR CONDITIONING & REFRIGERATION NEWS to be sure that I am completely up to date as to what goes on in the sports world.

Your current assortment of persiflage about the gridiron sport was nearly complete. The only tale left out of course was the one about a football team that suggested to their schedule maker that they schedule Notre Dame next year on Friday because Catholics do not eat meat on Friday. Another concerned the little Jewish quarterback on the CCNY team when they played Notre Dame (those were the Notre Dame teams of pre-1950 years).

Did you see the TV broadcast when Dartmouth, on fourth down with seven yards to go on their own 23-yard line, had to use a running play because a punt would have gone back over the punter's head and probably out of bounds in the end zone behind him? That happened to me once back in 1926 when I was a kid playing in high school.

SAM GLASS

Philosophy of the Week

On the occasion of his 65th birthday, K. T. Keller, board chairman of Chrysler, observed:

"You can always attain success by helping other men, rather than by fighting with them. You help a man be a success and you'll grow bigger yourself."

Forty is the old age of youth: Fifty is the youth of old age."—VICTOR HUGO.

Electrical New Orleans recently published this gem:

Errata and "Annual Report"

We need to digest a little humor now and then, hence the sub-joined Annual Report, received from a nationally known electrical manufacturer.

"To our Stockholders:

"Your officers are glad to report business over the past year has been vastly improved, we feel that much of the company's success during 1949 was due to a more vigorous policy of trying to make the best of it all. It has been the custom of the company officers to worry too much. Under the new policy 70 per cent of our officers have cut their fretting down 86½ per cent for the fiscal year.

"Your company was able to get a little work done around the plant in 1949 by naming six vice presidents in charge of visits from tax agents, thus saving the higher executives a major amount of time. We built a new wing on the factory in which all data, facts, figures, reports, explanations, and apologies demanded by the government may be prepared and turned out.

"The company has also appointed a vice president in charge of AP-PREHENSIONS, and two vice presidents in charge of GRAVE MIS-GIVINGS."

Buttered Side UP

Dealers, salesmen, and sales managers who get on top and stay on top are realistic men who don't trust dubious "figures" or slide rule methods of selling. They get ahead because they have a head. They're humble but confident, salty and charming, perky and probing. They test the temperature of public emotions and opinions themselves, and they get a big kick out of their friendships with people of every description and in all walks of life.

Although they enjoy good food, clothes, cars, clubs, and companions to the hilt, they remember that the

Iron Curtain of exclusive social circles can be the kiss of death to their careers. They mix with John Doe and Jane Roe.

Honestly, they get a big boot out of life. Thanks to this change-of-pace and shifting of scenes, their "buddies in the bleachers" become valued friends and trustworthy advisers.

The best salesmen know all sorts of people, and like almost everyone instinctively.

Intensely personal personality salesmen may be nearly extinct; but they aren't obsolete. Salesmen, promoters, and executives who are too coldly "scientific" may be. Their methods and attitudes aren't in tune with the times.

Brass Hats who get off their high horses and mingle with the boys in the cheap seats become more effective board chairmen, sales managers, advertising directors, and Vice Presidents in Charge of Anything.

Seats In the Bleachers

People aren't predictable. They're human. And, hence, contrary. Old attitudes change. They always have and they always will.

Business executives who trust all surveys and "figures" merely because they're presented mathematically will have to face that fact squarely sooner or later. To form realistic judgments and make right decisions they'll need to get acquainted with The People themselves. Ivory-tower "planning" can come a-cropper badly.

No longer do voters and buyers admire Big Shots who look down, write down, and talk down to them. No longer do they ape the vanishing "carriage trade." Snob appeal in advertising is out-of-date. So is kowtowing to "dignity" and conspicuous luxury.

Garden variety Americans will buy what you have to sell—IF they're convinced that you're one of them—and that you're honestly trying to be a good citizen, like they are.

The America of Our Forefathers

To blindfolded defenders of obsolete methods, the preceding statements-of-fact about altered attitudes undoubtedly are disgruntling and, possibly, damnable. At the very least they're uncomfortable, because they suggest that we should abandon luxurious ruts, see less of our best friends, and do things we hadn't dreamed of doing.

What's the purpose of getting ahead if we can't move into upper brackets and more exclusive circles? Good answer: any privileged clubman who treasures his luxuries above his responsibilities is just asking for the fluctuating he's been getting—and will get more until he puts both feet back on the ground.

This New Mood of American voters and buyers really isn't different or radical. On the contrary, it's a return to the Rugged Individualism of their 18th and 19th Century forefathers.

Essentially it's a rejection of the false trust in Fuehrers ("big shots") and Special Privileges, which are the root causes of wars, strife, and confusion. America's founders rebelled against this sort of thing, and America's voters and buyers regularly reactivate this rebellion.

Fundamentally, Americans are conservative. Their current "mood" is a return of realism, and a rejection of phoney classism.

The customers YOU hope to influence are your brothers-under-the-skin. They agree with Shakespeare that "all is not gold that glisters." They can't be treated as mathematical "norms, skews, means, or medians." They're human beings, and they hope you'll get acquainted with them.

You'll find them in the bleacher seats.

CHOICE OF THE INDUSTRY Since 1927

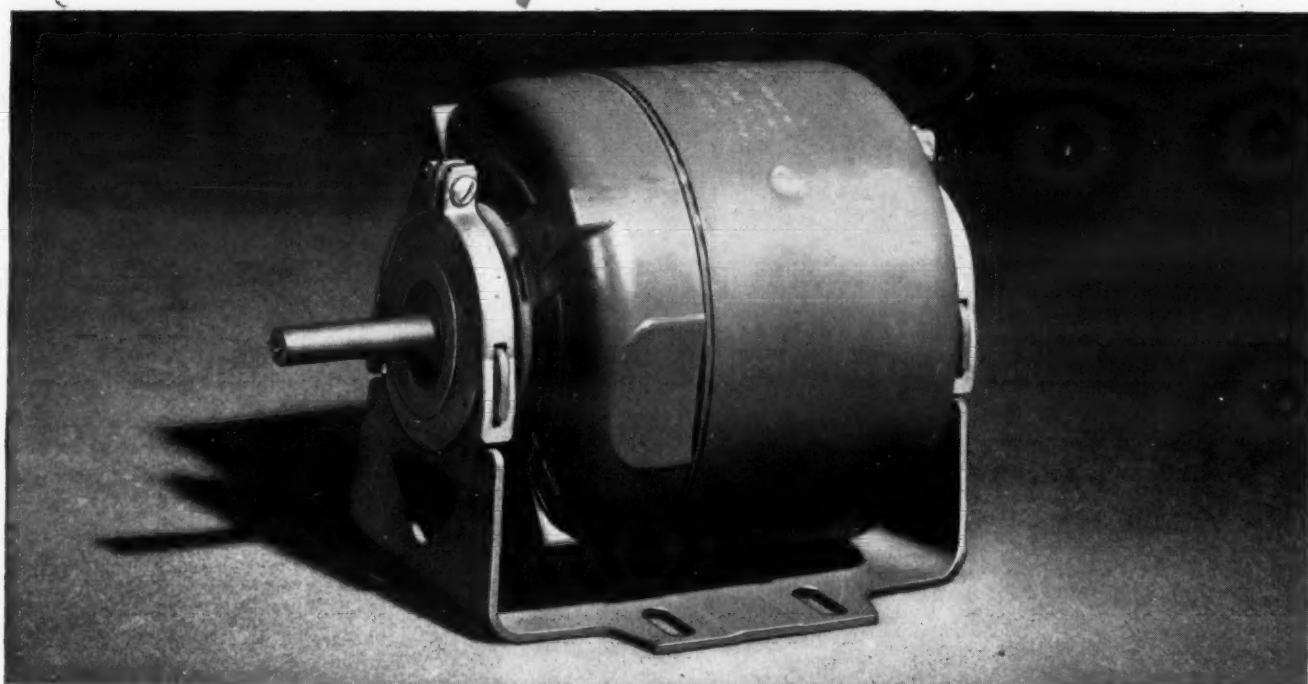
Quality

Refrigerator Door Gaskets and Accessories

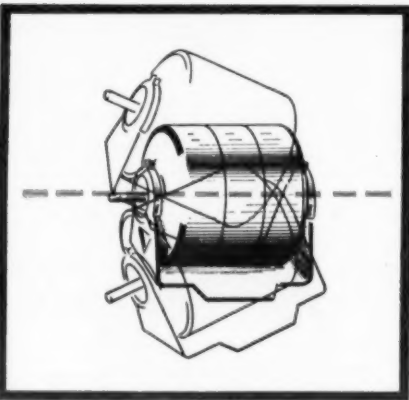
JARROW PRODUCTS

470 N. LA SALLE ST. CHICAGO 10, ILLINOIS

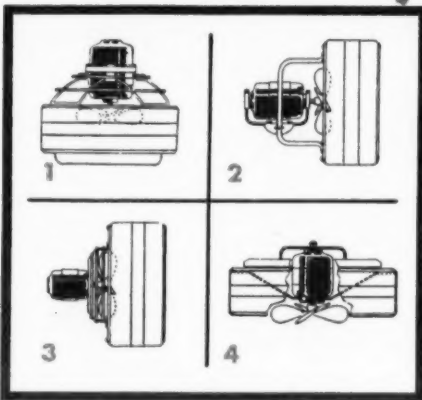
Just Right For Fans



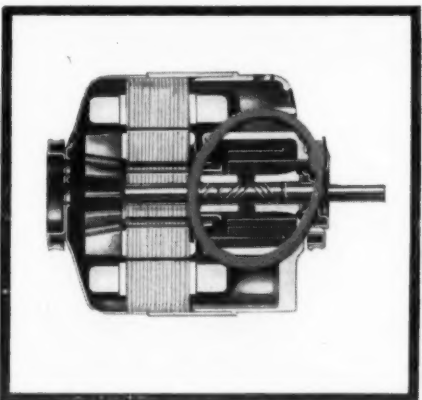
G-E Unit-bearing Motor



Operates at any angle



Mounts four ways



Requires no maintenance

Whatever your mounting arrangements: shaft up, down, or any other position, the unit-bearing, forced-lubrication system is dependable—requires no additional oil. Resilient mounting is supplied where noise level must be extremely low. Suitable control also available for two-speed or three-speed operation.

WIDE CHOICE OF RATINGS

Available ratings from 25 millihorsepower to 1/12 horsepower offer wide selection for many fan sizes. G-E sales engineers will be glad to help you select and apply the right motor. Write for more information in bulletin GEA-5338. Apparatus Dept., General Electric Company, Schenectady 5, N. Y.

You can put your confidence in —

GENERAL  ELECTRIC

700-113

Defense Order Numbers How To Extend Them To Your Suppliers

WASHINGTON, D. C.—The Department of Defense has recently issued a list of the Defense Order code numbers it is using in placing priority production orders with private contractors and explained how the contractors can pass these numbers on to their suppliers to get necessary materials to fill the orders.

The Defense Department pointed out that there is no priority or preference between program code numbers. It said the two digit program code number merely identifies the group into which the procurement item falls.

The list of Defense Department program code numbers is as follows:

- DO-01 Aircraft program
- DO-02 Guided missile program
- DO-03 Ships program
- DO-04 Tank-automotive program
- DO-05 Weapons program
- DO-06 Ammunition program
- DO-07 Electronics and communications equipment program
- DO-08 Fuels and lubricants program
- DO-09 Clothing and equipage program
- DO-10 Transportation equipment program
- DO-11 Building supplies and equipment for troop construction program
- DO-12 Subsistence program
- DO-21 Miscellaneous program
- DO-22 Department of Defense construction program
- DO-98 Production equipment for private contractors
- DO-99 Basketing code number for use by certain persons as provided under SS 11.9 Regulation 2, as follows:

"In the case of a manufacturer of common components or shelf items or any other person who has a number of rated orders for which he cannot place orders for minimum commercially procurable quantities of materials, to fill the rated orders individually, he may place one rated order for all the materials using the identification symbol DO-99. However, the amounts so ordered may not exceed the total amount of the material required for the rated orders so combined."

Manufacturers or suppliers who receive an order bearing one of the ratings DO-01 through DO-22 inclusive, or DO-99 as provided in Regulation 2, may extend the rating on their own purchase orders to obtain production materials to be physically incorporated in the procurement items or to replace inventories expended for that purpose.

The extension is made by entering the following on purchase orders: "Certified under NPA Regulation 2, DO-(insert two digit program code number appearing on purchasing order you receive from your customer)."

The DO-98 rating cannot be used on purchase orders by private manufacturers to procure specified items of production equipment unless its use has been approved by the military departments as necessary for production on military orders.

Application for authority to use the DO-98 rating must be made to the contracting officer of the military department having the principal interest in the rated order production of the contractor or subcontractor.

Application will be made on National Production Authority Form NPAF-2 which may be obtained from any field office of the Department of Commerce or local procurement officers of the military departments.

In using this authority relative to production equipment, the following criteria will be employed before assigning the right to apply ratings under program code number DO-98:

There must be a determination that the contractor is using his existing equipment to the fullest practical extent to perform on rated orders and that the contractor has exhausted all reasonable efforts to obtain new or used equipment on an

unrated basis.

Production equipment is defined as follows:

"Equipment used in producing goods or services, such as the following:

"Equipment for cutting, abrading, grinding, shaping, forming, joining, measuring, testing, heating or treating of production materials in manufacture, or for the handling of equipment or production materials or 'in process' products within a manufacturing, processing, assembling, or service establishment."

Production equipment manufacturers who receive a DO-98 rating on an order for production equipment items may extend it in the same manner as other manufacturers on purchase orders for production materials to be physically incorporated in the items or to replace inventories expended for that purpose.

NEW VET HOSPITAL:

**Big Refrigeration Installation,
Air Conditioning Serve Institution**

OMAHA, Neb.—The new 14-story Veterans Hospital here has been formally opened, featuring the latest equipment in air conditioning and refrigerated food storage.

Cost of the structure was \$11,000,000 plus \$3,000,000 worth of equipment including the refrigeration and air conditioning systems which serve 340,000 sq. ft. of floor space in the 350-ft. by 184-ft. building.

Air conditioning equipment has been installed in the operating rooms, laboratories, X-ray rooms, and allergy rooms.

The huge third-floor kitchen will turn out 1,700 to 1,800 meals per day. To accomplish this, one of the largest refrigeration installations of its kind in the country has been made, including eight walk-in refrigerators that are connected with a mono-rail system to the elevators to handle meat and other perishables.

When the staff is at full strength it will require six dietitians, 16

cooks, meatcutters and bakers, and 65 food service workers including waiters, dishwashers, and other kitchen workers. Five dining rooms have been provided and equipped with ice water and ice cube dispensers. The hospital will make its own ice cream and do its own baking.

The building is laced with two miles of electric cables, 28.5 miles of conduits, and 116 miles of wiring. Nebraska Sheet Metal & Roofing Contractors of Omaha installed 9.5 miles of sheet metal ducts for the air conditioning and ventilating system.

The same firm recently supplied air conditioning ductwork for Brandeis department store, Cudahy office building, United Benefit Life Ins. Co., Northwest Bell Telephone Co., and University of Omaha, all of Omaha.

The air conditioning, plumbing, and heating systems were installed by B. Grunwald, Inc., of Omaha, a 51-year-old firm which has installed

such systems from coast-to-coast.

Some of the more recent major installations include Veterans Hospitals at Hartford, Conn., St. Cloud, Minn., Excelsior Springs, Mo., Coatesville, Pa., Knoxville, Iowa, and Portland, Ore.; the Utah state capitol at Salt Lake City; Nebraska state capitol at Lincoln; high school at Dallas; and the U. S. Coast Guard Academy at New London, Conn.

Cuban Cooling Installations

For 10 Mos. Set New Record

WASHINGTON, D. C.—More air conditioning equipment reportedly was installed in Cuban stores and offices in the first 10 months of 1950 than in any full previous year, the U. S. Embassy in Havana recently informed the Office of International Trade, U. S. Department of Commerce.



Remington

ELECTRIC ROOM AIR CONDITIONERS

fastest growing line
in the fastest growing segment
of the fastest growing business
in America today!



Model 8— $\frac{3}{4}$ h. p. window unit. Two-tone metal cabinet.



Model 12—1.5 h. p. or Model 10—1 h. p. Traditional mahogany cabinet.

Air conditioning is America's fastest growing business—and room air conditioning the fastest growing part of it. Remington, with a 300% sales increase in 1950, is probably the fastest growing line and the only company engaged exclusively in room air conditioning.

For 1951, Remington presents the most complete line of room air conditioners on the market today—8 basic models, air or water cooled, from $\frac{1}{2}$ to 1 $\frac{3}{4}$ hp. It's the big line for bigger profits for you!

See Remington, the most complete line:

At the International Heating, Ventilating & Air Conditioning Exposition in Philadelphia in SPACE 726

At the Chicago Market, in Room 1454 Merchandise Mart



Model 6— $\frac{1}{2}$ h. p. window unit. Two-tone metal cabinet.



Model 10—1 h. p. or Model 12—1.5 h. p. Bleached mahogany.



Leader Model—1 to 1.5 h. p. aircooled or water cooled. Utility cabinet.

Remington Air Conditioning Division
Remington Corporation
Auburn, N. Y.
Cables: Remingair

Market Uses More Refrigeration

UTICA, N. Y.—Extensive new refrigeration equipment has been installed in the expanded food market of Brigano Brothers at 120 South. It includes a 22-ft. refrigerated meat counter for self-service and refrigeration equipment for frozen foods, dairy bar, and beer in containers.

They'll Do It Every Time By Jimmy Hatlo



AN INTERNATIONAL INSTITUTION • SUBSCRIBERS ALL OVER THE WORLD

Trade Mark
registered
U. S. Patent
Office:
Est. 1926Copyright
1951.
Business News
Publishing Co.

F. M. COCKRELL, Founder

Published Every Monday by BUSINESS NEWS PUBLISHING CO.,
450 W. Fort St., Detroit 26, Mich. Telephone Woodward 2-0924.

Subscription Rates: U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$5.00 per year; 2 years \$8.00. All other foreign countries: \$7.00 per year. Single copy price, 20 cents. Ten or more copies, 15 cents each; 50 or more copies, 10 cents each. Please send remittance with order.

GEORGE F. TAUBENECK
Editor and Publisher

PHIL B. REDEKER, Editorial Director

C. DALE MERICLE, Associate Editor

JOHN SWEET, Assistant Editor

HUGH MAHAR, Assistant Editor

GEORGE HANNING, Assistant Editor

ROY DENIAL, Assistant Editor

Editorial Assistants: MARGARET DEAN,

MARGARET POMMERENING.

E. L. HENDERSON, Business Manager

ROBERT M. PRICE, Adv. Representative

ALLEN SCHILDHAMMER, Adv. Rep.

ALLEN S. RUSSELL, Adv. Rep.

BETTY JANE TULLOCH, Adv. Secy.

WALTER J. SCHULER, Production Mgr.

JOHN F. JOLIAT, Circulation Manager

Member, Audit Bureau of Circulations. Member, Associated Business Papers.

VOLUME 62, No. 2, SERIAL No. 1,138, JANUARY 8, 1951

"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—Charles A. Dana.

Do You Have 'Both Feet On The Ground'?

"Easily understandable---
and a great aid to service engineers"

REFRIGERATION PROBLEMS AND THEIR SOLUTION

In four volumes, J-1, J-2, J-3, and J-4

by Paul Reed



Handy, practical, reference information for the refrigeration service engineer, "Refrigeration Problems and Their Solution" is written and illustrated so as to be of interest to salesmen, users, and others who want a fuller knowledge of refrigeration.

You'll like the way Paul Reed has organized his material . . . and he writes clearly, making these books easy to understand and a pleasure to read. And because Paul Reed has such a wealth of practical knowledge of refrigeration, and years of experience behind him, you'll find reading these books the next best thing to a person-to-person chat about your refrigeration problems. Conveniently cross-indexed for instant use, "Refrigeration Problems and Their Solution" can provide "the missing link" in your search for authentic advice on "how to make it work."

VOLUME 1

Measuring Temperature; What Heat Is; Temperature-Pressure Relationships; Components In the Compression Cycle; Expansion Valves and Their Properties; Capillary Tube; Float Valves; Heat Exchangers; Oil-Refrigerant Mixtures; Control Settings; Air Circulation; Multiple Systems; etc.

VOLUME 2

Condensers; Compressor Shaft Seals; Defrosting Evaporators; Compressor Oil; Charging Refrigerant; Humidity and Air Circulation; Carbon Dioxide; Use of Gauges; Trouble-Shooting; Preventive Maintenance; Control of Moisture; Leaks; Care of V-Belts; Lapping Seals, Plates; Service Charts.

VOLUME 3

Lost Time and Short Cuts; Refrigerants and Tables; Mollier Chart; Two and Three Stage Compression; Leaks and Moisture; Electric Currents; Single and Three Phase Systems; Motor Troubles; etc.

VOLUME 4

Cleaning Parts Before Repairs; Compressor Noise; Compressors In Parallel; Frozen Compressors; Service Problems; Overloaded Motors; Making Money In the Service Business; Absorption; Evaporative Cooling; The Heat Pump; Comparative Cost of Fuels.

In Four Volumes J-1, J-2, J-3, J-4

\$1.50 per Volume

USE THIS HANDY FORM

Business News Publishing Co.
450 West Fort St., Detroit 26, Mich.

Please send Paul Reed's books as follows:

..... copies J-1, \$1.50 each
..... copies J-2, \$1.50 each
..... copies J-3, \$1.50 each
..... copies J-4, \$1.50 each

Check for \$..... enclosed ☐ Bill me

Name

Address

City Zone

State

*Books sent post-paid if remittance accompanies order.

1-8-51

Effects of Credit Control

SO FAR retailers and wholesalers in our industry haven't, in large numbers, raised Ned about the higher down payments required on the sale of appliances (from 15% to 25%) the reduction of maximum maturity from 18 to 15 months, or the application of controls to items selling for \$50 or more instead of a \$100 minimum.

Some dealers have even expressed the belief that Regulation W does more good than harm to smaller dealers by checkmating department stores and chains from extending credit terms they can't afford to match. That may be true in many cases and places. However, it should be noted that protection from competition is a gun that can backfire.

One of the big difficulties encountered with controls and "protection" of any kind is that they're always discriminatory, and that they tend to grow like a cancer. One leads to another, and soon business is hog-tied.

Regulation W, which controls only a few of many consumer products bought on time, and which imposes tighter payment requirements on appliances than on furniture, is strongly discriminatory. Instead of checking inflation by discouraging consumer purchases of appliances, it may abet inflation by diverting loose money to unregulated luxuries, like jewelry, night clubs, etc.

Any time a government planner interferes with natural economic forces, things happen which he didn't expect. Thus, when small businessmen prod the planners to "protect" them, they're likely to be hurt. Example: Every time Regulation W has been reimposed or amended big-time operators advertise special deals, and catch a flood of buyers by urging them to beat the deadline. Government regulations, which few customers really understand, are open invitations for off-side promotions, fictitious mark-ups, and other dodges to deceive the public.

Bureaucratic regulations are costly to administer and confusing to obey. The more regulations, the greater the likelihood that a small businessman will fail to comply with one of them unintentionally.

Inflation Hedge

THE ONLY practical insurance a businessman can buy against wholesale impairment of his capital during an inflationary, high-tax period is a larger investment in advertising, according to Stanley Harold Morgan, noted management consultant.

In his report to executives, "How Advertising Prevents Capital Impairment Caused by Inflation," he declares that advertising protects investments and property by:

(1) Creating great equity values. Sustained advertising, he declares, invariably enhances the value of a company's stock.

(2) Protecting the advertising investment of previous years against dissipation and deterioration.

(3) Developing prestige and goodwill as a springboard to push sales effectively when competitive marketing conditions return. Advertising, counselor Morgan Avers, possesses an advantage over any other way the manager of a business can deploy its money in uncertain times. Why? Because it creates earnings that "multiply the value of physical assets and multiply the value of an enterprise as an institution."

"In the face of the certainty of capital impairment on a broad scale in the years ahead, advertising as an instrument of stockholder recoupment is not to be underrated," he adds.



Inspecting Norge's new "Displa-Mobile" are A. H. Witzleben (second from left), Norge sales promotion manager; and (l. to r.) John Rivenburgh, Frederic D. Amour, and Sol J. Berger, all of Berger-Amour Studios, Chicago, creator and producer of the display.

Norge Takes to Air With Dealer Display

CHICAGO—Norge has taken to the air with its new point-of-sale display designed to take advantage of wasted display space in the retail store.

Known as "Displa-Mobile," the display components are suspended from the ceiling in perfect balance and the entire display rotates in a constant circular motion relying only on natural air currents always present for its mobility.

The "Out of This World" Norge theme for its 1951 line is evidenced in the display not only through copy but by the astral figures making up the Displa-Mobile.

The new display was unveiled by A. H. Witzleben, Norge sales promotion manager, Dec. 4 in the Green Briar hotel in White Sulphur Springs, W. Va., at a meeting of 500 Norge distributor principals and distributor wholesalers.

It was shown again Dec. 18 in the Broadmore hotel, Colorado Springs, Colo., at a similar meeting. The occasions were the showing of the 1951 Norge line and the outlining of its advertising and sales promotion plans.

Displa-Mobile is a creation of the Berger-Amour Studios here.

L. J. Cook Represents I-H In Southern Region

CHICAGO—Appointment of L. J. Cook of New Orleans as southern regional refrigeration representative for International Harvester Co. was announced by R. H. Burnside, assistant general sales manager.

Cook formerly was assistant manager of general sales in the New Orleans district. In this capacity he played a big part in the New Orleans district's impressive record in the recent IH refrigerator sales contest. The district sold 133% of its quota.

International Harvester also announced the appointment of Miss Nell Davis as district home economist for the Nashville, Tenn., sales district. She was graduated from Blue Mountain college, Blue Mountain, Miss., in the spring of 1950.

S. C. Mill To Air Condition

FORT MILL, S. C.—The Springs Cotton Mills announces that plans have been completed by its engineering department for an air conditioned addition to the Fort Mill plant.

The structure will measure 101 ft. by 269 ft. and will house about 400 looms. Work on the project is scheduled to begin in the near future and should be completed in about eight months.

'Rolling Showroom' Makes the Rural Run

Filled with New Household Appliances All Ready To Operate, Dealer's Display Van Follows REA Lines In Central Tennessee

LEWISBURG, Tenn.—One appliance dealer who has found the farmer a ready prospect for major appliances is Henning Murrey, head of Murrey Appliance Co. here.

He has an enviable record of major appliance sales all sold through his "rolling showroom" truck, which covers a dozen counties around the city of Lewisburg.

Murrey had little chance to capitalize on the rural market until 1948, when rural electrification was built up sharply in the central Tennessee section.

In 1949, Murrey got his rolling showroom under way, a big, attractive truck, mounted on a 2-ton van body, which has rolled from one farmhouse to another ever since.

Unlike dealers who merely put a refrigerator, range, or automatic washer on a truck and haul it from prospect to prospect, Murrey offered an "active display." His first step, after getting the truck decorated with colorful, eye-appealing signs, was to install an electrical generating system, which would permit appliances to operate.

The big generator, connected to the truck's engine through a flexible shaft and delivering 110-120 volts, is adequate to operate any appliance "out on the road."

"We found long ago that a non-operating appliance has only one tenth the selling pull of a refrigerator making ice cubes or a washing machine actually washing," Murrey

said. "Therefore, we think that the added expense was one of the best investments we could make."

This was proved from the fact that the appliances sold off the truck during the first month of operation more than repaid entire cost of the electrical generating system.

Like other dealers, Murrey follows each new R.E.A. line as it is installed. Preferably the firm reaches the farmhouse a week or so before the R.E.A. line goes in, but with these burgeoning out in all directions, it has been impossible to keep up with them.

The rolling showroom is staffed by two salesmen on the road. Murrey himself takes a regular hitch along with his three specialty men. One only is left behind in the store to take care of townspeople, while the other two concentrate on "doorstep selling."

It isn't unusual for the truck to stop at a single home for as long as three hours as the farm housewife tries one appliance after another. The firm cheerfully stays on the job for long periods because, as Murrey has found, few people will tie up the truck's time for a long period unless they are genuine prospects.

"Over the space of a year or so, we will probably be able to carry out a doorstep demonstration at every farm home on an R.E.A. line," the Tennessee dealer indicated. "To date, we have found, we are the only dealership which has placed an op-

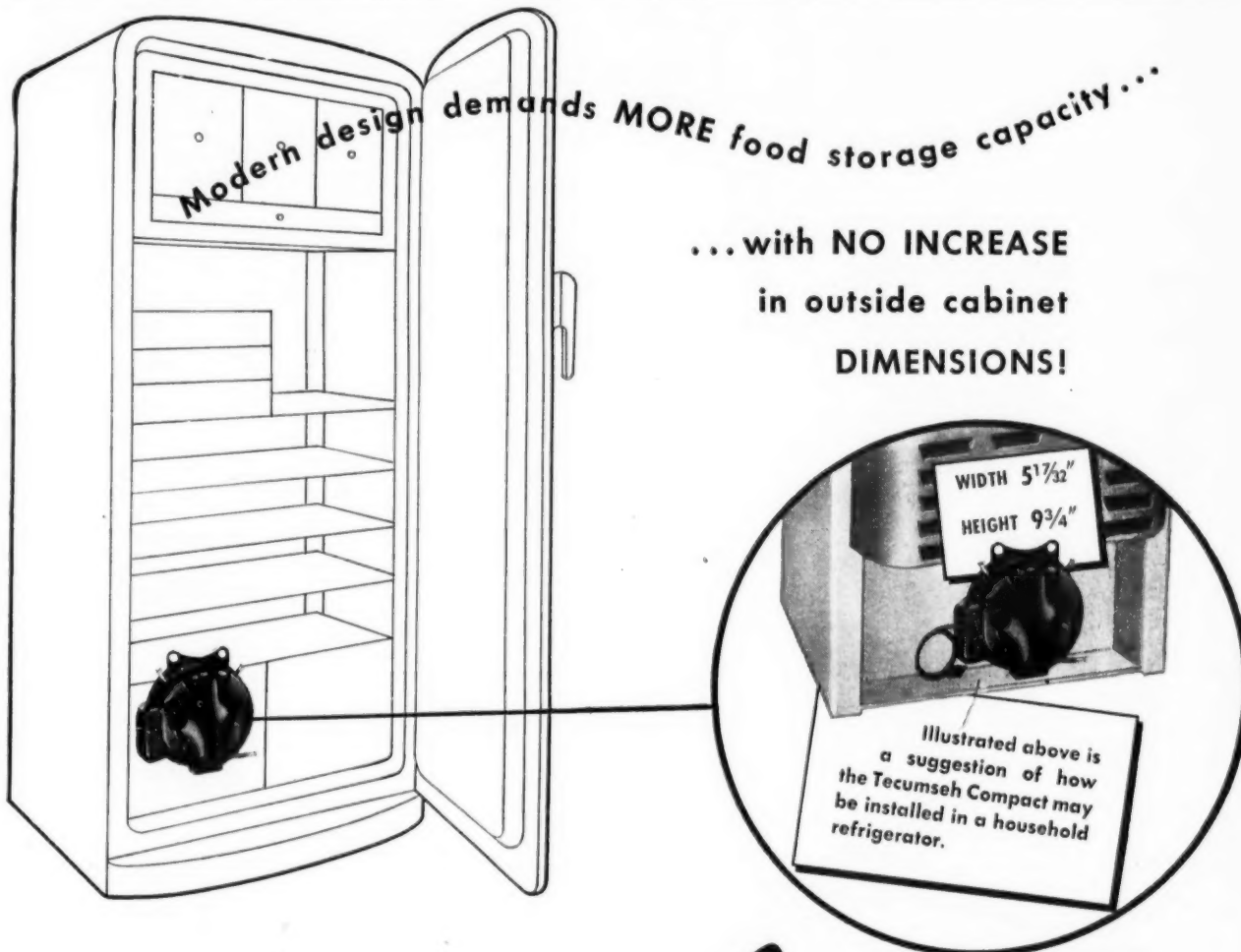
erating model where the prospect may see it conveniently."

The interior of the truck is handsomely laid out. At the left-front immediately behind the driver, is an operating electric range, with a 6-tier shelf fixture in between on which a dozen small appliances are ready to operate. In the rear are two full-sized refrigerators, and a home freezer, filled with foods and soft drinks, which Murrey cheerfully gives to his prospects to prove the efficiency of the equipment.

Washing machines, vacuum cleaners, driers, and other appliances may be added as required, but it is the refrigerator, washing machine, range, and home freezer combination which gets most results.

Murrey has gone to extraordinary lengths to please the dubious farm prospect who wants to "think it over" before making a purchase. Frequently, when the customer has remained "on the fence" for two or more calls, the appliance in which the farmer is interested is disconnected from the truck, carried inside, and left for a "try-out period" in the farm house. In leaving some 30 refrigerators, to date, Murrey has only had to pick one up again.

Naturally, he doesn't leave the box on the first call, but if such measures appear to be helpful, Murrey will demonstrate the box through the day to several prospects, and then unload it as the last call of the evening, before returning.



That's why the trend is to the TECUMSEH

COMPACT

Modern design gives today's refrigerators a greater food storage capacity in relation to overall cabinet size than was deemed possible just a few short years ago. Unit compartments have been reduced in size or eliminated entirely. Food compartments have been extended, in many cases substantially to floor level. Thus storage space has been increased by two or more cubic feet with no increase in exterior dimensions, and with but little added load on the compressor.

This remarkable achievement is made possible by the Tecumseh Compact. Due to its small size, the Compact may be installed in a smaller-than-usual unit compartment, mounted on the back of the cabinet, or placed in a "dimple" in the cabinet liner. When used with the new flue-type static condenser,

food storage space is extended to the bottom of the refrigerator.

The tremendous popularity of the Tecumseh Compact is shown by the fact that more than 100,000 refrigerators equipped with Tecumseh Compact compressors were placed in homes in the first full year of production. Today, over 200,000 Tecumseh Compacts are in use in home freezers, beverage coolers and vendors, water coolers, complete kitchens, midjet trailer and sports refrigerators, as well as many models of household refrigerators.

For Tomorrow's design in your refrigerator Today—specify the Tecumseh Compact. Write or wire for complete details.



TECUMSEH PRODUCTS COMPANY
TECUMSEH, MICHIGAN

EXPORT DEPARTMENT: 2111 WOODWARD AVE., DETROIT 1, MICH.

World's largest independent producer of compressors and condensing units for the refrigeration industry.

RATING 'RESTRICTORS': Two Series of Curves Outlined for ASRE

NEW YORK CITY—Methods of rating "restrictors" (more generally known as capillary tubes) were outlined before the American Society of Refrigerating Engineers at its 46th annual meeting here by N. E. Hopkins, development engineer of York Corp.

In presenting the data which covered "Freon-12" and "Freon-22," Hopkins pointed out that ratings were needed not only to let the engineer determine the bore and diameter before running tests but to provide a visual picture of flow characteristics in the restrictor as well as permitting analysis of over-all system operation.

Two series of rating curves were presented, one "striving for accuracy to the sacrifice of convenience," the other providing "quicker answers" with a sacrifice in accuracy, "especially at extreme conditions," as Hopkins expressed it.

The Series I ratings provide independent rating curves for both the flash length (that part which contains flashing liquid), and the subcooled length.

"By the use of independent factors

for the two lengths, this method of restrictor length determination is inherently more accurate," he said.

The over-all performance characteristic of a restrictor is provided in the second series of ratings, which are admittedly not as accurate, "but for practical purposes the differences in accuracy would not be appreciable," he states.

Hopkins also provides in his paper an appendix giving details as to the construction and use of the various rating curves to assist others who may wish to pursue the subject further, including the investigation of refrigerants besides "F-12" and "F-22."

He suggests also the possibility that airflow ratings be established for restrictors so that refrigerant flow could be established in relation to airflow. This would permit not only the bore and length of a new restrictor to be specified but also the required airflow, thus eliminating one inaccuracy. The latter results from the fact that the bore on commercial tubing, he explains, is not held closer than ± 0.001 in.

EASIER TO READ! COMPLETELY REVAMPED WITH NEW TYPE FACES

WHOLESALE ONLY

"Service Doesn't Falter When It Comes From Harry Alter"

Here's Your New Edition of

HARRY ALTER'S

DEPENDABOOK No. 153

Illustrates, Describes and Prices* OVER 9,000

REFRIGERATION

PARTS and Supplies

* some items up to 60% below regular prices

Write on your letterhead to

The HARRY ALTER Co.

1728 South Michigan Avenue Chicago 16, Ill. 134 Lafayette Street New York 13, N.Y.



**HERE'S
LOW-COST
COOLING
FOLKS WILL
BUY!**

Coolair
TRADE MARK

When you can offer homeowners, tenants and businesses a really good cooling system that they also can afford, you've really got something! The Coolair line is complete — includes window and wall units, single and twin attic package units, plus home, commercial and industrial units up to 9-Ft. blade diameter. For the rough going ahead, tie into a proposition that will be a dependable profit-maker!

**THIS SALES PLAN
WILL BOOST YOUR
PROFITS HIGH!**



1 VALUABLE FRANCHISE—You are assured of a market area large enough for real profit opportunities.

2 SALES TRAINING—Authorized dealer personnel are trained under factory supervision. You profit RIGHT NOW from your Coolair Franchise.

3 NEW, HARD-HITTING ADVERTISING AND PROMOTION—Coolair advertising and promotion make your selling job easier! Includes literature, displays, selling tools.

Tie into a deal that will get you YOUR share of cooling profits for 1951! Mail this coupon TODAY. No obligation.

Ask about
Pre-Season
"Early Bird"
Profit Plan!



AMERICAN COOLAIR CORPORATION
Leaders in Air Cooling for 23 Years

Dept. 11, American Coolair Corporation
Jacksonville 3, Florida
Please RUSH us full information about the
Coolair proposition for 1951. We are interested in
() a dealership () a distributorship.

NAME _____
TITLE _____
FIRM _____
ADDRESS _____
TOWN _____ ZONE _____ STATE _____

What We Learned from the 'Mothball Fleet'

Importance of Keeping Inside of Building Dry, and Proper Use of Dehumidifying Equipment Accented In Studies Made by Navy

DETROIT—Application of proper moisture control methods will prevent paint peeling off a house or maintain a decommissioned battleship in rust-free fighting trim, it was explained by Prof. E. R. Queer of Pennsylvania state college in a discussion before the Michigan chapter of the American Society of Heating and Ventilating Engineers recently. "Moisture coming through the walls of a house from the warm interior causes blistering and peeling of paint and rotting of walls," Prof. Queer declared, showing slides of an experimental test house as well as actual houses to emphasize his point. "Actually, there's no necessity to use paint on wood as a preservative. Consider the houses in the Scandinavian countries and Switzerland where the wood has been preserved for years and years without paint. The only real reason for painting the exterior of a house is that we think its appearance is improved."

HOW TO PREVENT PAINT FROM PEELING

"If we must paint the exterior of the house and fill the walls with insulation, there are two general methods we can use to prevent the paint's peeling," he explained. "We can vapor seal the interior wall. Probably the best way is to put one or two coats of a high gloss paint on the plaster and then wallpaper or paint the desired finish over that. More conventional vapor sealing material can be on the interior side of the studs during construction, but unfortunately most workmen are not too careful in putting on the vapor barrier. It takes only a small opening to let the moisture travel through and cause trouble."

"Another way to avoid paint blistering is to ventilate the exterior wall. The claspboard siding can be nailed to thin furring strips so there will be a small space between the siding and the sheathing of the wall. With an opening allowed at the top of the wall, this permits air movement behind the siding which removes the moisture and prevents blistering of the paint."

"Moisture in the walls of a building is becoming a serious problem because modern homes are built much tighter and have a much higher moisture content," Prof. Queer stated, "and I'm a strong proponent of getting rid of all humidification apparatus in the house. I don't think it's needed."

Although the comments on home moisture problems aroused the most interest, Prof. Queer's discussion was largely devoted to recounting how dehumidification helped the Navy put the major share of its fleet, some 2,700 vessels, in "mothballs" following World War II.

After first presenting an official Navy film showing highlights of the mothballing operation and stressing the point that the aim was to keep the ships in such a state of preservation that they could be reactivated in approximately 30 days, the speaker discussed major aspects of the problem. As a commander in the Navy during the war he had directed research on the proposal.

WHAT THE PROBLEMS WERE IN 'MOTHBALLING'

"The phenomenon of condensation is very important in considering the preservation of materials," he emphasized. "Hard surfaces, such as glass and metal accumulate moisture

which is usually in the form of a monomolecular layer, but sometimes in droplets. This monomolecular layer gave us great concern in the Navy ship program."

"We knew that if we controlled the humidity in ships we could preserve their material and structure. Research started at the Philadelphia Navy Yard in 1944. Through experiments we learned that by maintaining a relative humidity of 30% we got virtually no corrosion in ships."

"One of the problems was that a wide fluctuation in temperature and humidity occurred within a ship because of diurnal changes. Cold air would be drawn in at night and condensation would result. This fluctuation prevented us from depending on 45% relative humidity to prevent corrosion, and actually it wasn't much more expensive to go to 30%."

Annual operating cost of the dehumidification system, he revealed, was \$1,800 to \$2,000 for a battleship or carrier.

It was originally decided that in addition to providing control of humidity for the ships in the mothball fleet, rust-preventative film would be applied to much of the equipment on board, including certain parts not easily reached by the dehumidified air, such as the interior of the boilers, turbines, internal combustion engines, and the like, explained Prof. Queer.

"In the rush of demobilization after the war, however, there wasn't time to use this protective film in all cases, but dehumidification alone worked very well in most instances. On the other hand, in some cases the rust preventative was used in excess, but this has generally proved to be little of a handicap. Where this has been found in ships reactivated as the result of the Korean situation, practice has been to simply let the preventative film burn out of the boilers, etc., which it does in the course of time."

WHY WERE DESICCANTS USED AND NOT HEAT?

The dehumidifying equipment employed by the Navy consists of solid desiccant air drying machines which are automatically reactivated, he went on to explain.

"Use of refrigeration for drying was considered, but the low temperature encountered in this application greatly limited its use. It is important to keep in mind," declared Prof. Queer, "that materials absorb moisture much more rapidly at lower temperatures, and although the cost of installing refrigeration was approximately the same as the solid desiccant machines, the latter were more economical to operate for this purpose."

The question is frequently raised, he added, as to why the drying of the air couldn't be done by means of heat only.

"If we attempted to employ electrical drying the cost would be excessive. Use of steam for drying was suggested, but inevitably there'd be leaks in the steam lines which would nullify the dehumidification."

Even with the solid desiccant machines there was the problem of distributing the air throughout the ship, he indicated.

"It was finally decided to use the fire mains. These go from one end of the ship to the other and from top to bottom, so we distributed the dry air through the fire mains. This did

result in drying out gaskets in the mains, which cause leaks when the ships were reactivated, but the gaskets swelled shut within a few days to stop the leaks."

10 TONS OF MOISTURE IN A 10,000-TON SHIP

"It's also important to recognize that merely lowering the relative humidity of the ship down to 30% doesn't remove the moisture and prevent corrosion. Experiments conducted with submarines before the war showed that. This assumption overlooks the fact that it's hard to remove that monomolecular layer of moisture. It takes eight to 10 weeks of initial drying to bring the relative humidity in a big ship down to a sufficiently low point. After the initial pull-down they could probably operate at 50% humidity most of the time. In a 10,000-ton ship we estimate there's 10 tons of moisture on the metal."

Prof. Queer also pointed out that while naval vessels are designed to be of reasonably tight construction, it's impractical to keep the ships under air pressure, except for submarines.

"We figured on having a 1 sq. ft. opening for every 1,000,000 sq. ft. of interior surface," he explained.

He also pointed out that the dehumidifying machine couldn't be used as a bilge pump.

"If there were any leaks in the hull they had to be taken care of before dehumidifying started."

"Besides drying the ships themselves, it is very important to preserve the spare parts for the ships," he added. "In 1947 the Navy started on a program of dehumidifying its spare parts warehouses. Eighty of the warehouses, which were generally about 200 ft. wide by 600 ft. long, were maintained at 40% relative humidity. The great mass of material in the warehouse meant there was greater heat capacity and a flywheel effect to minimize the diurnal changes encountered with a ship, so it was not necessary to go to the 30% relative humidity here."

Crosley Transfers Hughes To Washington Office

CINCINNATI—F. J. Hughes, who has been manager of contract and builder sales, has been transferred to the position of manager of the Crosley office in Washington, D. C., according to W. A. Blees, vice president of Avco Mfg. Corp. and general sales manager of its Crosley Div.

In his new capacity, Hughes is responsible for correlating all Crosley activities pertaining to government contracts.

M. B. Beck, manager of the Crosley kitchen equipment sales department, has now also assumed the responsibility for the builder sales department. Beck recently transferred to the headquarters office in Cincinnati from the Philadelphia regional office where he had been in charge of kitchen and builder sales.

L & S Gets L & H Sales Award

MILWAUKEE—Johnston P. Scott, sales manager and vice president of the A. J. Lindemann & Hoverson Co. here recently presented a national championship sales award plaque for 1950 to Lavenson & Savasta.

Pepple Heads Southwest Sales District for McCray

KENDALLVILLE, Ind.—Appointment of Robert K. Pepple as district sales manager of sales district 7 has been announced by McCray Refrigerator Co. He succeeds T. J. Murphy, who retired Oct. 1.

The district comprises the states of Texas, New Mexico, Louisiana, Arkansas, Mississippi, and Oklahoma, and the city of Mobile, Ala. Headquarters are in Dallas, Tex.

Since early in 1950, Pepple had been serving as southern divisional manager of national accounts. Previous to that time, he had been branch manager at Dallas and Memphis, Tenn., and then district sales manager in the northwestern district. Earlier, he had operated as a McCray distributor in Jackson, Mich.

Pepple served in the U. S. Navy during World War II.

Worthington Systems To Keep Harry Cool

HARRISON, N. J.—The contract for refrigeration machines to be used in the air conditioning system of the remodeled White House in Washington, D. C., has been awarded to Worthington Pump & Machinery Corp., by Reuben L. Anderson, mechanical contractor, according to W. H. Feldmann, vice president in charge of sales for Worthington.

The contract calls for two centrifugal refrigeration systems, each composed of one 200-ton compressor with cooler and condenser. The units will be driven by 250-hp. electric machinery synchronous motors through Worthington gears.

Reinhard Promotes Pause To General Sales Manager

MINNEAPOLIS — E. L. Davis, president of Reinhard Bros. Co., appliance distributorship, has announced the appointment of James L. Pause as general sales manager of all specialty sales departments, including major appliances, electrical housewares, radio and television, and hard surface floor coverings.

Pause, who is a vice president of the firm, has been in charge of the major appliance department for the past four years. He has been with the company for 20 years.

Lawrence L. LaClare, who joined the company in 1923, has been named sales manager of the major appliance department to succeed Pause.

Luxury Hotel Is Air Cooled

MIAMI BEACH, Fla.—Completely air conditioned, Miami Beach's newest luxury hotel, the Casablanca, has just opened for business on Collins Ave. at 63rd St. The new hotel, a nine-story structure, has 252 double rooms and 10 penthouse suites.

TAKE ADVANTAGE of DEVALUATION

LEC REFRIGERATOR SEALED UNITS ALL VOLTAGES



Now available for the trade at keen prices either with body and starting relay only or complete, ready for immediate installation as depicted above, the "LECOMETIC" suitable for ambient temperatures up to 110° F.

We can also offer standard open type condensing units. Also the "BOLCO" absorption unit operated on paraffin or gas.

ARN SALES DEPT. L-E-C
Telephone Bognor Regis 2201 I.O. Lines
BOGNOR REGIS ENGLAND

keep cool!



Ranco has 8 models for WATER COOLER REPLACEMENTS!

Don't worry about finding the right replacement for Water Coolers. And don't hunt all over town. Just ask your Ranco wholesaler to show you the eight Ranco precision-built models specially designed for replacement installations.

REPLACE IT RIGHT WITH RANCO

Ranco Inc.
COLUMBUS 1, OHIO

WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

TELLING and SELLING

A GUIDE TO SMART ADVERTISING AND
MERCHANDISING PRACTICES

This series of articles comprising ideas and principles for the small retail or manufacturing business is written by James D. Woolf, who was for more than 20 years a vice president and director of J. Walter Thompson Co., one of the largest advertising agencies. Out of his experience embracing all types of advertising and merchandising he brings his counsel to the small businessman who must plan his own advertising and promotional efforts.

By James D. Woolf

Do You Know Your Market?

Among national advertisers, continuous market research is today an established practice. A great many of them maintain their own marketing research departments.

This practice unfortunately is not so well established among retailers and small local or regional businesses.

Even though you may be a small advertiser, doing business perhaps only in one city, why is market research important to you? What is the purpose of a market study? Broadly speaking, its purpose is to "locate" and "tag" for you the people who are logical prospects for whatever it is that you are selling—who they are, where they are, what they do, what their buying habits are, etc.

A lot of products—postage stamps and salt, for example—are in universal demand at every income level. Other products—such as air conditioning units and motor boats—are likely to be bought only by people in better than average income brackets. Still other merchandise—shotguns, rods and reels, tennis equipment, skis, etc.—appeals only to people addicted to certain specialized hobbies and pastimes.

Then there are services—laundries, dry cleaners, banks and trust companies, insurance, and so on—that do not find markets of equal attractiveness among all classes of people.

Then, too, market conditions even within local areas are in a constant state of ebb and flow. Economic change—the closing down of a factory, the decline of a once prosperous local industry—may eliminate an old market. The quick springing up of new residential subdivisions may call for more advertising pressure in certain selected neighborhoods. The spectacular growth of universities since the war has changed the market picture of many communities.

CHOICE OF THE INDUSTRY Since 1927

Quality

Refrigerator Door Gaskets
and Accessories

JARROW PRODUCTS

420 N. LA SALLE ST. CHICAGO 10, ILLINOIS

AIRO stands for

Fast, dependable,
world-wide service.

Refrigeration and
Air Conditioning parts
and supplies.

Write for current Catalog

AIRO SUPPLY CO.

2732 N. Ashland Ave., Chicago 14, Ill.

Refrigeration Units WANTED

Desire to purchase 1/8 to 1-HP Sealed or open type; standard brands; Complete condensing units; Also parts; Give full details.

HARWOODE EXPORT CO.

31 E. 4 Street, New York 3, N. Y.

that the young teller paid a sociable visit to every farm home in the county. When his survey was finished some months later, the bank had on file a card on every farmer in the county, and on it was recorded such facts as the size and character of the acreage, the barn, the home; the kind and number of crops, animals, and implements; the size of the mortgage, if any; what plans of expansion were being considered; and such intimate details as what church the family attended and what education was being planned for the children.

On the basis of this data the bank shaped its advertising plans to capture countywide business. The new "reaching out" plan tripled in the first year the bank's volume of business!

HOW TO MAKE A SURVEY

How should the average small businessman go about making a market survey? What tools are at his disposal? Can he afford to spend money for research? Must he employ an expert? It is difficult to give a blanket answer to these questions. Much depends on the size of the business and of the community. Obviously, Pittsburg, Kan., is one thing and Pittsburgh, Pa., is quite another.

In many instances help can be enlisted from the community's newspapers and radio stations, its banks, its Chamber of Commerce, and local trade associations. From the Bureau of Census data are available in regard to population and its distribution by age, education, sex, race, etc.

A number of current publications that contain useful market data are obtainable from the United States



(... it pays to know the facts about your market ...)

Department of Commerce. In college towns students in advertising classes, anxious for practical experience, frequently are glad to collaborate for little more than expense money. But most of the work, unless you engage a research organization, you'll have to do yourself.

You'll find market research well worth the effort. If you do not know your market—and know it almost as intimately as the street you live on—you cannot possibly appraise the selling job you are doing. Your market may be vastly bigger than you think. And it is not unlikely that your advertising can do a much better job for you than you have ever imagined.

Tompkins-Johnson Gets Contract

RALEIGH, N. C.—Low bids on a projected 100-bed hospital for Union county total \$1,305,000. Tompkins-Johnson Co., Charlotte, was low bidder at \$41,443 for air conditioning.

speaking about TRADE-INS

is a spiffy new 24-page booklet just published by the News. It presents you with some fresh, dandy ideas on how to help eliminate one of your perennial bugaboos, the "trade-in" problem.

The whole problem is divided into three categories and some sound, sensible methods on how to deal with each category are described. 1. Acquiring the "trade-in" and determining its worth. 2. Reconditioning the "trade-in." 3. Marketing the "trade-in."

The whole contents of this booklet is compiled from the best articles on and experiences of other appliance dealers whom the News has talked to in the past year. These ideas are actually used successfully and perhaps they would work as well or better for you. At least you can read about them and see how they fit in with your operation.

The booklet sells for 50¢ a copy. Order now! Use this coupon.

Business News Publishing Co.
450 W. Fort St., Detroit 26, Mich.

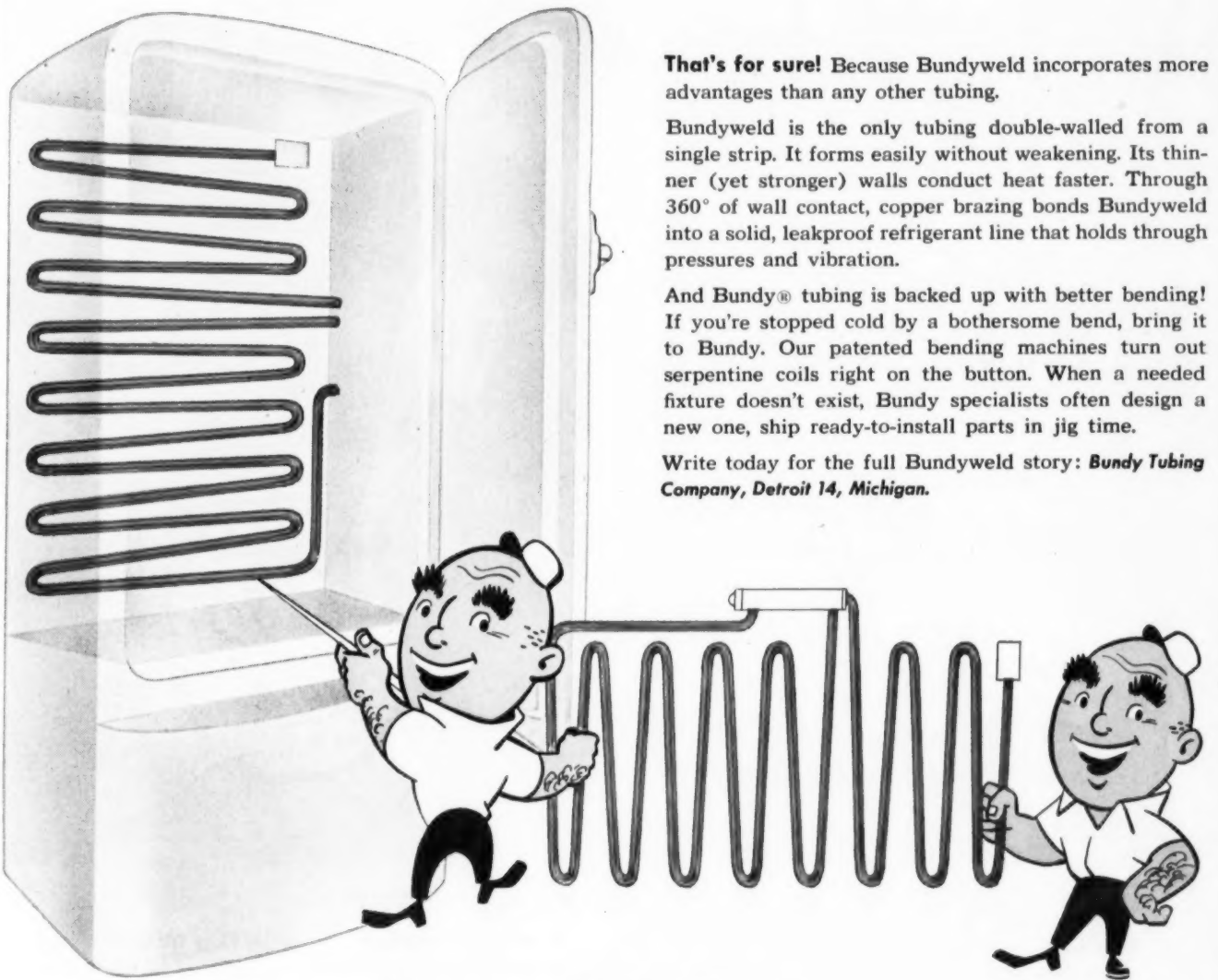
Please send me copies of your new booklet "Speaking About Trade-Ins," at 50¢ per copy.

Name

Address

City State 1-8-51

Bundyweld... backbone of better refrigeration



That's for sure! Because Bundyweld incorporates more advantages than any other tubing.

Bundyweld is the only tubing double-walled from a single strip. It forms easily without weakening. Its thinner (yet stronger) walls conduct heat faster. Through 360° of wall contact, copper brazing bonds Bundyweld into a solid, leakproof refrigerant line that holds through pressures and vibration.

And Bundy® tubing is backed up with better bending! If you're stopped cold by a bothersome bend, bring it to Bundy. Our patented bending machines turn out serpentine coils right on the button. When a needed fixture doesn't exist, Bundy specialists often design a new one, ship ready-to-install parts in jig time.

Write today for the full Bundyweld story: Bundy Tubing Company, Detroit 14, Michigan.

Bundyweld Tubing

DOUBLE-WALLED FROM A SINGLE STRIP

WHY BUNDYWELD IS BETTER TUBING



Bundyweld starts as a single strip of basic metal, coated with a bonding metal. Then it's ...



continuously rolled twice around laterally into a tube of uniform thickness, and



passed through a furnace. Bonding metal fuses with basic metal, presto—



Bundyweld... double-walled and brazed through 360° of wall contact.

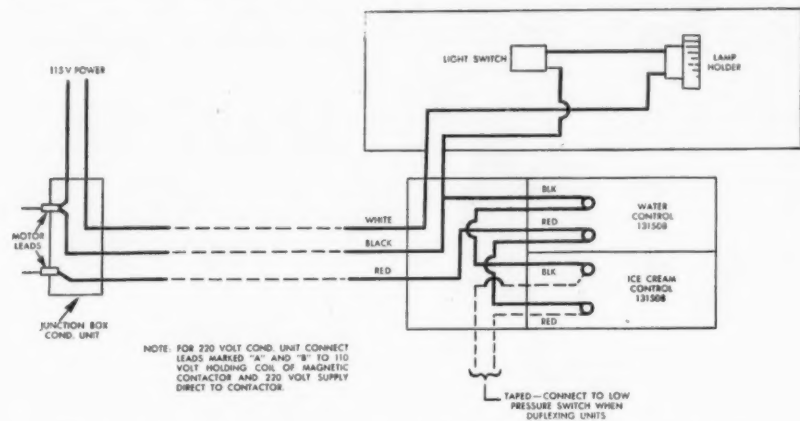


NOTE the exclusive patented Bundyweld beveled edge, which affords a smoother joint, absence of bead and less chance for any leakage.

SIZES UP TO 5/8" O.D.

Bundy Tubing Distributors and Representatives: Cambridge 42, Mass.: Austin-Hastings Co., Inc., 226 Binney St. • Chattanooga 2, Tenn.: Pearson-Deakins Co., 823-824 Chattanooga Bank Bldg. • Chicago 32, Ill.: Lapham-Hickey Co., 3333 W. 47th Place • Elizabeth, New Jersey: A. B. Murray Co., Inc., Post Office Box 476 • Philadelphia 3, Penn.: Rutan & Co., 1717 Sansom St. • San Francisco 10, Calif.: Pacific Metals Co., Ltd., 3100 19th St. • Seattle 4, Wash.: Eagle Metals Co., 4755 First Ave. South • Toronto 5, Ontario, Canada: Alloy Metal Sales, Ltd., 881 Bay St. • Bundyweld nickel and Monel tubing is sold by distributors of nickel and nickel alloys in principal cities.

DETROIT PUBLIC LIBRARY



This is the wiring diagram for Liquid Carbonic's "Diamond 50" fountain.

Installation & Service Pointers Detailed for New Soda Fountain

Liquid Carbonic Corp. Releases Data on 'Diamond 50' Systems

By C. Merryman, General Service Manager,
Soda Fountain Div., Liquid Carbonic Corp.

STARTING UP AND ADJUSTING 'DIAMOND 50' FOUNTAINS

Before making any adjustments, allow the fountain to pull down to approximately the correct sleeve temperature with no water draw.

Provide thermometer in 6-oz. glass under water draft arm. Suspend thermometer (preferably a remote reading thermometer) in the center of the control sleeve. See refrigera-

tion diagram to determine control sleeve.

Remove control panel cover.

NOTE: For best results, make adjustments in the chronological order given.

EXPANSION VALVE ADJUSTMENT ON ICE CREAM

1. With the sleeves in operating range of temperature, decrease the

PART 2

superheat in short steps until the suction line frosts out of the heat exchanger. (Facing the adjustment end of the valve turn the stem clockwise to open or decrease the superheat.)

2. Then increase the superheat by $\frac{1}{4}$ turns until the frost disappears into the heat exchanger. Allow at least 5 minutes between adjustments. (To increase the superheat or close the valve, turn stem counter-clockwise.)

3. The suction pressure should vary on $\frac{1}{2}$ -hp. units between 2 p.s.i.g. and 15 p.s.i.g. and between 3-in. vacuum and 10 p.s.i.g. on $\frac{3}{4}$ -hp. condensing units.

EXPANSION VALVE ADJUSTMENT ON WATER COOLER

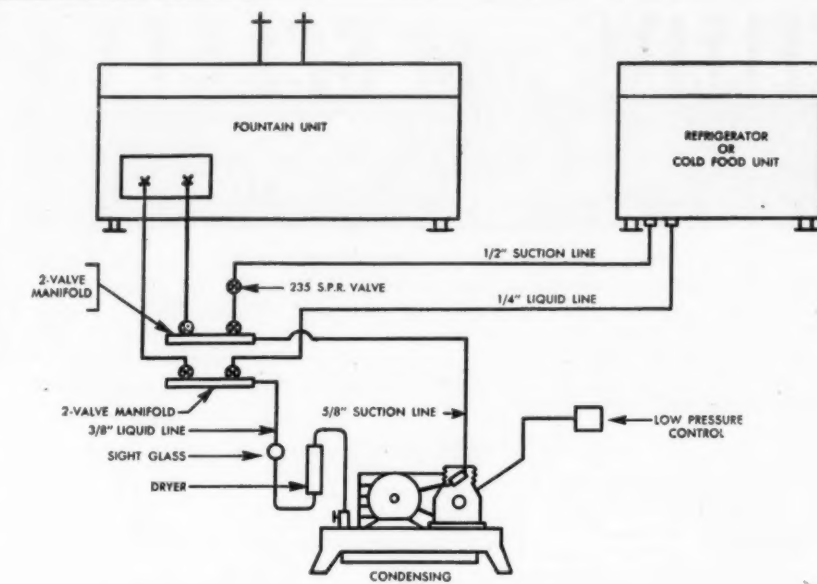
1. Remove one lead from the ice cream control to make it inoperative.

2. Set the water control very cold to keep condensing unit running.

3. Draw water from the draft arm until the condensing unit starts. Continue to draw at the rate of one 6-oz. glass per minute.

4. If the suction line frosts out of the heat exchanger, increase the superheat on the expansion valve by $\frac{1}{4}$ turns until frost stops. Allow 5 minutes between changes. (Turn valve stem clockwise.)

5. If the suction line does not frost out of the heat exchanger, decrease the superheat until frost appears. Then increase superheat by $\frac{1}{4}$ turns until the frost stops.



Typical multiplexed fountain installation shows suggested connections.

6. To check further, increase draw to 6 oz. every 15 seconds. If the suction line frosts out of the heat exchanger, increase the superheat by $\frac{1}{4}$ turns and repeat at 5 minute intervals until the frost stops.

7. Check water temperature by drawing three glasses fast and take the temperature of the last glass. It should be 36° to 39°.

CONTROL ADJUSTMENT ON WATER COOLER

1. Make adjustment with one lead off of the ice cream control to make it inoperative.

2. Adjust the differential on the water cooler control to approximately 6°. (This is very close to the minimum differential.)

3. Turn the range dial very cold keeping the condensing unit running for 5 minutes. Then slowly adjust the dial warmer until it clicks "off" and the unit stops.

4. Next draw four to six 6-oz. glasses of water and if the unit does not start, turn the range dial warmer until it does start.

5. The condensing unit should not run over 3 to 5 minutes after each four to six-glass draw. If the running time is too long, the control setting is too low. Raise cut-out temperature by 2° on indicator and recheck.

CAUTION: A defective water temperature control or a setting too low will keep the condensing unit running unnecessarily and cause the ice cream sleeves to become too cold.

CONTROL ADJUSTMENT ON ICE CREAM

Reconnect wire on ice cream control.

The ice cream control setting will depend on the characteristics of the particular ice cream.

Method "A"

1. Set the differential very long. Allow the temperature to pull down to the desired cut-out temperature. Then turn the dial slowly "warmer" until the control cuts out.

2. Next allow the sleeve to warm up until the desired "cut-in" temperature is reached. Then carefully decrease the differential until the control "cuts on."

Method "B"

Faster, but less accurate than Method "A." Use where sufficient waiting time is not available and where the job can be readily rechecked:

1. Give the control an average setting of 6° cut-in and 0° cut-out (6° differential). Readjust later to customer's requirement.

INSTALLING CONDENSING UNIT

The refrigeration lines are connected to the heat exchanger in the control panel. Use $\frac{3}{8}$ -in. liquid line and $\frac{1}{2}$ -in. suction line on remote installations. A channel is provided from control panel to bottom of fixture to accommodate refrigeration, water, soda, and electrical connections.

Exercise special care in making flares or seating refrigeration tubing to insure perfect joints and freedom from leaks. After cutting the tubing to the required length, clean out any chips or filings from inside the tubing.

In cutting off tubing, hold the end down so that chips will fall out and not into the pipe. Remove any burrs from inside the tubing before flaring. Flare carefully to avoid splitting.

In tightening flare nuts on refrigeration tubing, particularly the $\frac{1}{2}$ -in.

size, a tighter joint can be obtained, with less possibility of damaging the flare, by putting a drop of oil on the back side of the flare so that the nut in tightening has a film of oil between it and the tubing flare.

Every installation and unit must be thoroughly checked for refrigerant leaks. This includes all condensing unit gasket sealed surfaces, valve caps, and all tubing connections.

DEHYDRATOR AND LIQUID LINE INDICATOR

Install a permanent silica gel dehydrator of ample size in the liquid line close to the machine. Install a sight glass (liquid line indicator) on the outlet side of the dehydrator, both vertically if possible.

The dehydrator (until saturated with moisture) will keep the "Freon-12" refrigerant free from moisture, preventing refrigeration trouble. The sight glass will enable the serviceman to readily check for shortage of refrigerant. It also enables him to determine when he has sufficient refrigeration in the system at the time of initial charging.

REFRIGERANT AND OIL CHARGE

Liquid fountains are shipped dry. Refrigerant and oil must be added to the system at the time of installation by whoever supplies the condensing unit.

Add refrigerant oil to each remote hook-up at the time of installation in the ratio of 1 lb. (1 pint) of oil for each 10 lbs. of "F-12" refrigerant charged into the system. Liquid Diamond "50" fountains must be used only with "F-12" refrigerant. The fountains are equipped with all valves and controls for "F-12."

MULTIPLEXING FOUNTAIN UNIT WITH OTHER REFRIGERATED FIXTURES

All necessary valves and controls, except the magnetic contactor (motor starter), for operation alone on a separate condensing unit are supplied with each fountain.

When other refrigerated fixtures, i.e., cold food unit or refrigerator, are multiplexed on the same condensing unit with the fountain, the temperature on the second fixture should be controlled by a low-pressure switch and a suction pressure regulating valve. The blower coil in the cold food unit or refrigerator must be operated on a defrosting cycle. Adjust the low-pressure control to cut in at 15 p.s.i.g. and cut out at 3 p.s.i.g. The approximate setting on the suction regulating valve should be 28 p.s.i.g. This will vary depending on the condensing unit running time and average operation back pressure. Set at 28 p.s.i.g. and readjust for fixture temperature.

The low-pressure control should be wired parallel with the fountain temperature controls so it may start the condensing unit independent of the fountain controls.

MULTIPLEX NO MORE THAN 2 FIXTURES

More than two fixtures should not be multiplexed on one condensing unit unless absolutely necessary. When more than one fixture is duplexed with fountain unit, add an additional suction pressure regulating valve for each different temperature requirement. If the same temperatures are required on all fixtures, a number of fixtures may be controlled with one valve by teeing the suction lines together and installing the valve in the common suction line.

you get
**double
protection**
against moisture with

DRYSEAL
REFRIGERATION TUBE



● Moisture hasn't a chance against Dryseal. It's double crimped that's why. A special, precise, mechanical double-crimp seal made at each end of the tube when it is manufactured keeps the inside dry as a bone and free from dirt. And, because of the way the seal is made, the diameter of the tube does not change. This permits it to pass through any opening large enough for the tube itself.

Dryseal is easy as pie to handle. Being dead-soft it

is easily bent with the hands. It is this same soft temper, and the ductility of the copper used, that makes Dryseal easy to flare for compression fittings without any danger of splitting. Economical tube sizes range from $\frac{1}{8}$ " to $\frac{3}{4}$ " O.D.

And, for your greater convenience we have just recently brought out Dryseal in a nifty-50 one-coil carton. This carton, which has been attractively designed for easy identification in stock, contains one 50-foot coil of Dryseal... is easier to handle, light weight, economical.



REVERE
COPPER AND BRASS INCORPORATED
Founded by Paul Revere in 1801
230 Park Avenue, New York 17, New York

Mills: Baltimore, Md.; Chicago and Clinton, Ill.; Detroit, Mich.;
Los Angeles and Riverside, Calif.; New Bedford, Mass.; Rome, N. Y.
Sales Offices in Principal Cities, Distributors Everywhere.

**NOW in the
NIFTY-50
one-coil
carton!**

Current Literature Available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

Delavan Has Chieftan Valve Plate Charts

—KEY NO. M-120—

DES MOINES, Iowa—Replacement valve plates for single, twin, or four-cylinder Chieftan refrigerator compressors have been added to the Delavan line of compressor replacement parts.

A free specification chart that illustrates and identifies valve plates and component parts for Chieftan may be secured by a written request.

ACP Releases New Service Data Sheet

—KEY NO. M-121—

AMBLER, Pa.—A technical service data sheet on ACP phosphate coating chemicals and processes for paint bonding, rustproofing, protecting friction surfaces, and improving drawing and extrusion has been released by the American Chemical Paint Co. here.

The 12-page booklet covers each of these subjects with descriptions,

illustrations, and charts. A list of the government specifications met by the company's phosphate coating chemicals is printed on the back cover.

Vilter Bulletin Reveals Compressor Features

—KEY NO. M-122—

MILWAUKEE—Over 20 features engineered into its line of multi-cylinder high speed "Freon" and ammonia compressors are disclosed in a new bulletin just published by The Vilter Mfg. Co. here.

The free bulletin, designated as No. 017, describes the application of this modern compressor, adapted for use with ammonia, to high stage or booster refrigeration service.

Featuring balanced movement and light weight automotive type pistons, Vilter Multi-Cylinder (VMC) compressors can be installed anywhere without special foundations. Even when run at speeds of 900 to 1,200 r.m.p. vibration has been reduced to an insignificant minimum.

Because it is compact in design and manufacture, the VMC delivers more capacity in less space.

Included in Bulletin No. 017 is a discussion of multi-stage compression and why it is superior in producing low temperature.

'Truth About Infrared Oven Broilers' Told

—KEY NO. M-123—

BROOKLYN—To clarify the "confusion and misrepresentation" on the infrared oven broiler, the Prevore Electric Mfg. Corp. here has recently issued a leaflet written in non-technical language called "The Truth About Infrared Oven Broilers."

The leaflet explains in question and answer form how infrared broilers operate, how to get good results with a broiler, how to use a broiler, and features of the Prevore broiler. It also gives a number of broiling recipes.

Leitner 1951 Cafeteria Equipment Cataloged

—KEY NO. M-124—

CHICAGO—A new cafeteria equipment catalog, describing the 1951 line of Add-A-Section standard food service units for cafeteria operation, is offered by the Leitner Equipment Co.

Many new items are included in Leitner's selection of equipment, classified as follows: steam tables, hot food tables, refrigerators, coffee urn sections, counter display stands, soda fountains, Lowerator sections, cafeteria counters, water stations, and allied items.

Buensod-Stacey Offers 2 Product Bulletins

—KEY NO. M-125—

NEW YORK CITY—Buensod-Stacey, Inc., announces bulletin No. 7 describing spray type air washers, humidifiers, and dehumidifiers. Complete specifications and sizes of same are shown in this new bulletin.

Another bulletin describes the Buensod-Stacey Rotary Strainer for use in such applications in which lint has to be recovered from the spray water before the water is recirculated through the spray nozzles.

Rotary Seal Lists Price Of Replacement Units

—KEY NO. M-126—

CHICAGO—Rotary Seal Co. here has recently published new stock and resale price lists on its line of compressor replacement units. The stock list also shows typical Rotary seal replacement unit constructions and gives general handling instructions.

Data on Evans Cases Covered In Spec Sheets

—KEY NO. M-127—

MT. VERNON, N. Y.—Two-color specifications sheets covering its line of self-service display cases have been made available to the trade by Evans Mfg. Corp. here. The sheets cover the new Evans frozen food display case, open triple tier display case, open display case that can be used for vegetables, meat, or dairy products, and dairy wall case.

Acco Prints Specs on 2 Ice Cream Cabinets

—KEY NO. M-128—

NEW YORK CITY—Specifications sheets on two new open top, glass front Acco ice cream cabinets, which were introduced at the 1950 Dairy Industries Show in October, have been released by the Authorized Cabinet Co. here.

One unit is the model 49GF with a capacity of 8½ cu. ft. and the other is the model 60GF with a capacity of 12 cu. ft. Complete interior and exterior dimensions are given.

Publishes Third Edition Of Fiberglas Bibliography

—KEY NO. M-129—

TOLEDO—Publication of the third edition of the Fiberglas Bibliography, a volume of annotated references to selected articles which have appeared in the nation's press, has been announced by Owens-Corning Fiberglas

Corp. The bibliography is available without charge.

Uses of Fiberglas products documented in the volume include applications in refrigerators, ranges, water heaters, forced-warm air furnaces, reinforced paper, reinforced hose, wire and cable, insulated shipping containers, storage batteries, automobiles, trucks and trailers, and aircraft.

The bibliography is of 88 pages and contains indexes of publications cited, authors, and applications and uses. It lists 710 references to articles in 338 publications.

Henry Valve Products Listed In Catalog 100

—KEY NO. M-1210—

MELROSE PARK, Ill.—A 16-page catalog of its products for refrigeration, air conditioning, and industrial applications has been issued recently by the Henry Valve Co. here.

Called Catalog No. 100, the book covers packless and packed valves, relief and check valves, strainers, driers, and liquid level gauges.

Howard Issues Specs On Low Temp Cabinets

—KEY NO. M-1211—

PHILADELPHIA—A specifications sheet on the Howard Refrigerator Co.'s new sectional ice cream and frozen food storage cabinets has been recently issued by the company. The cabinets are institutional sizes and for general storage in large stores, restaurants, hospitals, or markets.

Pyramid Manual Shows Functions of Amprobe

—KEY NO. M-1212—

NEW YORK CITY—A 16-page manual No. 110, "How to Make Your Job Easier with the Amprobe," the packet-size, snap-on volt ammeter, is now available from Pyramid Instrument Corp. here.

It describes the functions of the new tool for anyone who installs, repairs, services, or maintains electrical equipment. The Amprobe measures only 7½ x 2½ in. and is one third the usual weight of such instruments.

The new manual also describes some of the many jobs on which this instrument can save time and trouble, and also explains the details of how to use it and how to read the scales.

Schwitzer-Cummins Co. Publishes Fan Catalog

—KEY NO. M-1213—

INDIANAPOLIS—A condensed catalog on Fresh Air Maker fans and Hy-duty blowers for general ventilating purposes is currently being offered by the Schwitzer-Cummins Co. here.

The four-page brochure covers attic fans, window fans, portable fans, and blowers with single and double inlet.

Fred Robinson, advertising manager, said that the catalog will be continued through the 1951 season as the company does not expect to make much change in its line during the coming year.



Accurate control and operation of heating and air conditioning installations are both essential in the attainment of peak efficiency in industrial operations. Be sure of these facts with Bendix-Friez precision instruments built to the most exacting standards by the foremost makers of weather instruments.



BENDIX-FRIEZ

Model 185
Precision Humidity and Temperature Indicator

Hand-operated and calibrated to professional standards of accuracy by the maker of the world's finest weather instruments. Handsome, modern case—4" high, 5½" wide, 1½" deep.



BENDIX-FRIEZ

Model HA/2

Hand Aspirated Psychrometer
Accurate readings obtainable without special skill. Psychrometric readings can be taken at any point desired however inaccessible.



BENDIX-FRIEZ

Model 160

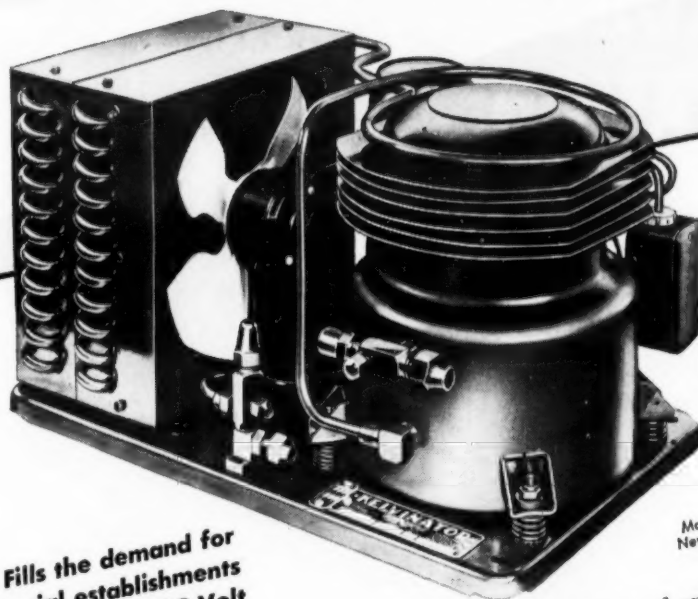
Portable Humidity and Temperature Recorder

3" x 5" charts, 10 or 30 hour records. Modern design . . . handy for small space and difficult locations . . . built to meet unusual conditions

WRITE:
FRIEZ INSTRUMENT DIVISION of
1426 Taylor Avenue
Baltimore 4, Maryland
Export Sales: Bendix International Division
72 Fifth Avenue, New York 11, N. Y.

BIG in demand...

BIG in reasons why!



New nominal ½ H.P. 115 Volt, 60 Cycle, Kelvinator Hermetic Condensing Unit! You demanded it! You got it!

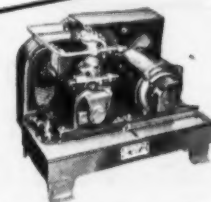
Model illus. New 6D2CRA

Fills the demand for commercial establishments and farms where 230 Volt current is not available.

Want to build repeat business . . . on a rock-solid basis? Sell Kelvinator and be sure of a satisfied customer every time! Look at Kelvinator's wide range of twelve, hermetic-type condensing units in sizes up to and including ½ H.P. Each is precision-planned, precision-built, precision-tested to Kelvinator's rigid standards of accuracy. Each is competi-

tively priced and bears the name that means top-quality to users everywhere. Demand Kelvinator for your next job. Repeat business will prove your choice! Prompt delivery on all models. Just call your nearest Kelvinator Distributor or Zone Office. Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Mich.

Kelvinator also makes available to you 15 open-type condensing units.



Model illus., O-150—air cooled 1½ H.P.

PROFIT TODAY...BUILD FOR TOMORROW WITH

Kelvinator

THE NAME THAT SELLS...THE NAME THAT SATISFIES!



KELVINATOR BEVERAGE COOLERS



KELVINATOR FROZEN FOOD MERCHANDISERS



KELVINATOR WATER COOLERS



KELVINATOR ICE CREAM CABINETS



KELVINATOR AIR DRIER

Refrigeration Problems

and their Solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Mixing Water Vapors & 'F-12' Vapors (3)

For our immediate consideration, the low density-high specific volume of water vapor has another very important significance. At ordinary room temperatures, the very low pressures of water vapor make it necessary to use a compressor of very high volumetric efficiency; otherwise the compressor is of no use in pumping water out of a system at ordinary room temperatures.

DRYING A SYSTEM BY VACUUM

For example, we have a coil that has been standing open and has, say 2 oz. of water as surface moisture on the inner walls of the coil. The coil has an internal volume of 1 cu. ft. The room temperature is 60° F.

We want to dry out this coil, and we have an old compressor that we have reworked, and we want to use it to draw a good vacuum on the coil. The compressor is in good

condition and will pump 29½ in. of mercury vacuum, with the discharge of the compressor to the atmosphere, so it is an unusually good compressor.

We connect the compressor to one end of the coil and cap the other end, and start the compressor. At first it starts to pull the pressure down rapidly, for the suction pressure is relatively high, so the volumetric efficiency is also high. By the time it has got down to 20 in. of vacuum it is going down more slowly, and by the time it is down to a 28-in. vacuum it is going down very slowly.

Finally it gets down to 29.4 in. of vacuum, which compares to a dewpoint of 60°, the room temperature. It will stay at this pressure until all of the water in the coil is evaporated. At this condition, saturated water vapor has a density of .001012 of a pound per cubic foot, and a specific volume of 988.6 cu. ft. per pound.

When the compressor started at atmospheric pressure it probably had a volumetric efficiency of perhaps 75 to 80%. As the suction pressure dropped, the volumetric efficiency fell off too, and quite rapidly. By

the time the compressor is down to 29.4, which is almost as low as it will pump, the volumetric efficiency is probably as low as 5%. If the compressor has a displacement of 1 cu. ft. per minute, then with a volumetric efficiency of 5%, the compressor will actually be pumping .05 (1/20) of a cubic foot per minute.

Originally, we assumed there were 2 oz. of water vapor in the coil. We will further assume that by the time the compressor has pumped down to a 29.4-in. vacuum, corresponding to a dewpoint of 60°, the room temperature, the 2 oz. has been reduced to 1 oz., or 1/16 of a pound.

Since the specific volume of the water vapor at 60° and 29.4 in. of vacuum is 988.6 cu. ft. per pound, then 1/16 of a pound will vaporize into 61.8 cu. ft. If the compressor is pumping .05 of a cubic foot per minute it will take it about 1,236 minutes, or 20.3 hours to remove the saturated water vapor, that is to turn the 1 oz. of water into vapor and take it out of the system.

Until all of the water is actually converted into saturated water vapor and pumped out, the compressor will continue to run at 29.4 in. of vacuum. At that time there will be

only water vapor left, and it will be at 60° dewpoint, and at a density of .00083 of a pound per cubic foot.

The compressor is still able to pump down another one tenth of an inch, that is to 29.5 in. of vacuum. It will do this slowly, but faster than it took the compressor to remove the vapor at 29.4 in., because the 1 oz. of water had to be vaporized and pumped out.

FINAL DEWPOINT IS 54°

At 29.5 in. the dewpoint is 54°, and the density is .000675 of a pound per cubic foot; but at 29½ in. the compressor's losses, because of leakage around the piston, re-expansion, etc., are so great that it simply can pull no lower a vacuum. In a room temperature of 60°, the density of the water vapor in the coil will be slightly less than .000675 but the dewpoint will be 54°, and that is the important thing.

Suppose that we want to use this coil in a refrigerator to be held at 40°, with the coil at 20°. At 20° the density of the saturated vapor is .000177 of a pound per cubic foot. If we have a density of .000675 in the coil, then the difference, .000498 of a pound will condense out when we cool this coil down to 20°. This amounts to about 3½ drops of water, which is plenty to cause trouble.

How then can this coil be made dry enough to put on the system so that it will introduce no moisture, or at least a negligible amount of moisture into the system? Obviously, the coil must be reduced to a dewpoint of 20° or lower, but even with an extra-good compressor that will pull a 29½-in. vacuum, we were unable to get below a 54° dewpoint. There are several ways that this can be done, which will be described in a following instalment.

(To Be Continued)

Westinghouse Buys Pharis Tire & Rubber Co. Plant

NEWARK, Ohio — The Westinghouse Electric Corp. has announced the purchase of Plant No. 1 of the Pharis Tire and Rubber Co. here and that the plant will be converted to a feeder operation for the main appliance division plant at Mansfield.

Approximately 300 or more employees will be added to the Westinghouse payroll here after the building has been converted and equipped to manufacture transmission units for Laundromat automatic washers, reported J. H. Ashbaugh, Westinghouse vice president.

Schiffmann To Manage Airtemp Chicago Region

DAYTON — Chester S. Stackpole, vice president and general sales manager, Airtemp Div. of Chrysler Corp., has announced the appointment of Alvin J. Schiffmann as manager of the division's Chicago region.

A native of Chicago, Schiffmann has been with Airtemp six years. He joined the division in 1944 as a district representative in the Chicago region. Two years later he was promoted to national account sales, the position he has held until now.

Schiffmann attended the Chicago public schools, spent one year at the University of Chicago, and two years at the University of Wisconsin.

Before joining Airtemp, he was an air conditioning and refrigeration salesman and dealer. During World War II, he served in the military intelligence branch of the Sixth Service Command in Chicago.

West Penn Oct. Appliance Sales 2½ Times '49 Month

PITTSBURGH—The dollar volume of electric household appliance sales reported by dealers in southwestern Pennsylvania during October totaled \$2,755,958 and was more than 2½ times greater than the October, 1949 total, the West Penn Power Co. reported recently.

Dishwashers scored the highest sales of any month on record. Garbage disposers, freezers, ranges, clothes driers, and automatic washers reached new highs for any October.

Unit sales during October as compared with October, 1949, follow:

Appliance	Oct. '49	Oct. '50
Refrigerators	1,021	1,400
Home and farm freezers	183	317
Ranges	602	877
Garbage disposers	29	49
Dishwashers	30	80
Room coolers	8	4
Clothes driers	55	202
Ironers	139	214
Washers, automatic	245	542
Washers, conventional	996	1,423
Vacuum cleaners	456	507
Water heaters	275	460

Texas Wholesalers Adds Two

DALLAS, — William J. Schnelle, president of Texas Wholesalers, Inc., which distributes Norge and Capehart products in north Texas, announces that W. E. Laswell and Sam Grasinger have joined his firm in an executive capacity.

What the serviceman should know about VIRGINIA REFRIGERATION products



To Charge a System,
Use Refrigerants
That Are
Consistently Pure,
Consistently Sure...

"EXTRA DRY ESOTOO" (B.P. +14°F.)

"Extra Dry" is the refrigeration grade SO₂ that service and maintenance engineers have endorsed for more than 20 years. Comes in all popular cylinder sizes.

"V-METH-L" (B.P. -10.7°F.)

Virginia Methyl Chloride is made specifically for refrigeration use. Low moisture content, low acidity and narrow boiling range recommend "V-Meth-L" for the most exacting requirements.

"FREON" REFRIGERANTS

"FREON-11"
"Boiling Point"
74.7°F.

"FREON-12"
"Boiling Point"
-21.6°F.

"FREON-22"
"Boiling Point"
-41.4°F.

"FREON-113"
"Boiling Point"
117.6°F.

"FREON-114"
"Boiling Point"
38.0°F.

Virginia Smelting Company is distributor for Kinetic's "Freon" Refrigerants.

HOW TO SEAL CASES, INSPECTION PLATES, PIPE OPENINGS

When you seal out moist air, you prevent condensation, corrosion and insulation troubles. The outstanding seal, the one preferred by service and maintenance engineers, is Permagum. Brown Permagum comes in 2½-lb. and 45-lb. slugs. Adheres to any dry surface. Never hardens; stays plastic from 0° to 350°F.; absolutely odorless. Gray white Permagum comes in rolls containing 80 ft. of ⅜" cords. Seals around wiring; won't attack rubber. Never hardens; odorless; can be painted immediately.



ASK YOUR WHOLESALE OR WRITE VIRGINIA SMELTING COMPANY

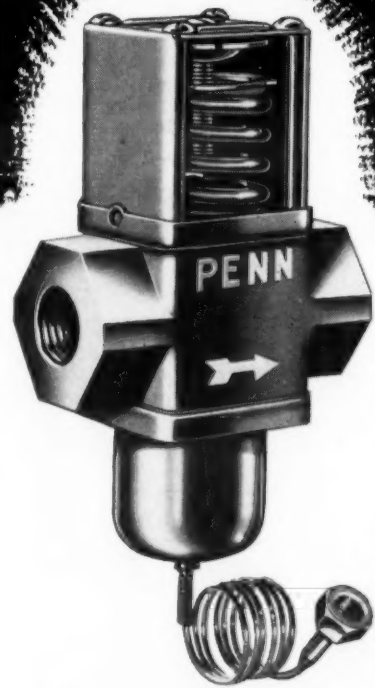
WEST NORFOLK

PHILADELPHIA • NEW YORK • BOSTON
CHICAGO • DETROIT • ATLANTA



VIRGINIA
Refrigerants

LOOK no other water valve has all these features



- No Water Hammer
- Highly Sensitive to Refrigerant Head Pressure
- No Sticking of Seats
- Easy Manual Flushing
- Eliminates Rusting of Range Spring
- No Corrosion or Sedimentation on Sliding Parts

The PENN Series 246 water valve can really "take it" and continue to give top performance. That's why more and more refrigeration men specify PENN... they know it's "tops" on every job. If you haven't tried it... do it now! Ask your wholesaler or write Penn Electric Switch Co., Goshen, Ind. Export Division: 13 E. 40th Street, New York 16, U.S.A. In Canada: Penn Controls, Ltd., Toronto, Ontario.

PENN
AUTOMATIC CONTROLS
FOR HEATING, REFRIGERATION, AIR CONDITIONING, PUMPS, AIR COMPRESSORS, ENGINES, GAS RANGES

Program for ASHVE Meeting Jan. 22-25--

(Concluded from Page 1)

report of the ASHVE Committee on Research will be given at the morning technical session the following day, by Robert C. Cross, chairman of the committee.

Among those who will participate in the symposium, which is scheduled for Wednesday, are Dr. Eugene F. DuBois, professor of physiology at Cornell University Medical College, New York, and medical director of the Russell Sage Institute of Pathology; Dr. Robert W. Keeton, head of the Department of Medicine, University of Illinois; and Charles S. Leopold, consulting engineer of Philadelphia.

Nathaniel Glickman, assistant professor of medicine and research physiologist at the University of Illinois Medical School, will act as moderator. Morning technical sessions will be held at the Bellevue-Stratford, meeting headquarters, and afternoon sessions will be at Convention Hall, adjacent to the Commercial Museum, where the 10th International Heating and Ventilating Exposition will be held. Thus, it is hoped that many members who are engaged in activities of the exposition will have an opportunity to attend some of the technical sessions.

The exposition, opening on Monday, Jan. 22, and running concurrently with the meeting, will remain open one day longer, closing at 6 p.m. Friday, Jan. 26. All space has long since been taken and a wide variety of new products will be shown in what will be the largest display of heating, ventilating, and air conditioning equipment ever held. Charles F. Roth is managing the show, and E. K. Stevens is associate manager.

Registration of guests and members for the meeting will begin on Sunday, Jan. 21, at the Bellevue-Stratford hotel. All plans for this, the 57th annual meeting of the ASHVE, are now complete. A. J. Nesbitt, general chairman of the committee on arrangements, announced. M. F. Blankin is honorary chairman of the committee, and F. H. Buzzard, is vice chairman.

Registration will be continued through Thursday. Information booths will be maintained at the Benjamin Franklin, Warwick, and Penn-Sheraton hotels, as well as the Bellevue-Stratford.

Beginning with a welcome tea for visiting members and guests on Sunday, Jan. 21, at 4 p.m., and continuing with a get-together luncheon

on the following day, a selection of events designed to explore the entertainment and historical possibilities of the Quaker City will be unfolded during the course of the meeting.

The entertainment has been scheduled so as not to conflict with the more serious purposes of the meeting. Special attention has been paid to the ladies with a fashion show, tea parties, sightseeing tours, etc., on their program.

For those who plan a post meeting trip, special arrangements for accommodations have been made for the Queen of Bermuda cruise to Bermuda and Nassau, leaving from New York at 3 p.m. on the Saturday (Jan. 27) following the meeting. Arrangements for the trip and inquiries regarding rates, plan of ship, etc., should be sent directly to Leon V. Arnold, 36 Washington Square, W., New York 1, N. Y., who is in charge of cruise arrangements.

Serving as chairmen of the special committees for the meeting are: banquet, M. E. Barnard; entertainment, E. K. Wagner; exposition, C. F. Dietz; finance, A. C. Caldwell; ladies, E. H. Darter; publicity, W. P. Culbert; reception, J. O. Kirkbride; sessions, John Everetts, Jr.; and transportation, Isadore Director.

The technical program follows:

MONDAY, JAN. 22, 9:30 a.m.

"Losses from a Floor-Type Panel Heating System," by F. W. Hutchinson, D. L. Mills, and L. J. La Tart.

"Field Studies of Heat Losses from Concrete Floor Panels," by C. M. Humphreys, C. V. Franks, and L. F. Schutrum.

"Analysis of Air and Panel Cooling Systems," by Charles S. Leopold.

TUESDAY, JAN. 23, 9:30 a.m.

"The Efficiency of Bituminous Coal-Burning Space Heaters," by J. W. Tieman and F. L. Bagby.

"The Measurement of Smoke," by K. O. Beatty, Jr., and James E. Deas, Jr.

Report of Committee on Research by R. C. Cross, chairman.

"Rating of Fuel Oils by a Test Unit," by D. W. Locklin and G. V. Parmelee.

"Smoke Measurement in Fuel Oil Test Unit," by D. W. Locklin and G. V. Parmelee (to be presented by title).

TUESDAY, JAN. 23, 2:30 p.m.

"A Survey of Electrostatic Precipitation," by E. A. Walker and J. E. Coolidge.

"Theory of Earth Heat Exchangers for the Heat Pump," by L. R. Ingersoll, F. T. Adler, N. J. Plass, and A. C. Ingersoll.

"Factors Useful in Ground Grid Design for Heat Pumps," by George S. Smith.

WEDNESDAY, JAN. 24, 9:30 a.m.

Symposium—"Man and His Relationship to Air," by Dr. Eugene F. DuBois, Dr. Robert W. Keeton, and Charles S. Leopold. Nathaniel Glickman, moderator.

WEDNESDAY, JAN. 24, 2:00 p.m.

"Operating Experience and Data from Sidewalk Snow-Melting System," by L. A. Stevens and G. D. Winans.

"Principles of Effective Heat for Steam Heated Structures," by C. O. Mackey, N. R. Gay, R. D. Tutt, E. G. Powell, and E. L. Broderick.

"Heating and Thermostatic Controls in the Transportation Industry," by N. O. Kirkby.

"Water-Vapor Permeability of Building Papers and Other Sheet Materials," by E. R. Bell, M. C. Seidl, and N. T. Krueger (to be presented by title).

THURSDAY, JAN. 25, 9:30 a.m.

"Use of Aircraft Propellers for Axial Flow Fans," by E. C. Lundquist and M. J. Hamilton.

"Roof Spray for Reduction in Transmitted Solar Radiation," by G. E. Sutton.

"Solar Energy Transmittance of Figured Rolled Glass," by G. V. Parmelee and W. W. Aubele.

Epting Promotes Ferguson To Sales, Promotion V. P.

CHARLOTTE, N. C. — Furman Ferguson, a veteran of more than 27 years in the radio and appliance field, who joined the A. F. Epting Appliance Co. last June as general sales manager, has been promoted to vice president in charge of sales and promotion, according to Frank Epting, president of the firm.



FIRST FLOOR and basement of Shulster's men's clothing store were both air conditioned by means of UsAirco unit (with built-in evaporative condenser) located below street level.

15-Ton Packaged Unit Solves Problem of— Ground-Floor Cooling In Tall Building

NEW YORK CITY—An interesting solution to the problem of air conditioning a ground floor and basement store area in a tall building, without wasting valuable floor area or city water, has been provided in a system recently installed in the new Joseph Shulster's men's clothing store at 341 Madison Ave., here.

The store, at the northeast corner of 44th St., features, in a single system, winter heating and summer cooling with automatic zoned temperature controls to maintain desired

weather conditions in the main floor sales area and the basement selling, fitting, office, and work areas, despite varying heat loads.

As a means of conserving both valuable floor space and city water, the system utilizes a 15-ton United States Air Conditioning Corp. refrigerated Kooler-air self-contained packaged unit, which has been placed in the corner of a work room in the basement.

Use of the one-piece unit, which contains a built-in evaporative con-

denser for saving approximately 95% of the required cooling water, eliminates the space requirements of an indoor cooling tower or separate evaporative condenser, or the difficulty of employing a roof tower atop the 20-story office building in which the store is located.

Conditioned warm or cool air is distributed from the central plant through ducts to grilles in the main selling area, the basement work room and selling space, and to ceiling diffusers in the fitting room and office, also in the basement.

Operation of either the heating or cooling system is accomplished through a simple toggle switch located near the store entrance.

Fresh air is introduced to the system through the transom above the entrance door to concealed ductwork which was integrated into the overall architectural design of the main floor section of the store.

As an economy measure, in moderate prevailing weather, this duct will automatically open up to take in 100% fresh air without operating the refrigeration unit's compressor. Exhaust is handled through the exhaust system of the main building.

Special consideration has been given to the heat from window display lights in the design of the system. A supply grille as well as a return exhaust blanket off this excess heat from the sales area.

To furnish winter heating, the UsAirco unit's heating coil has been connected to the building's main steam supply.

The new store was designed by the A. S. Freudman Co. and the air conditioning system was installed by Cort Mechanical Associates, contractor.

NEW 1951

CHEVROLET ADVANCE-DESIGN TRUCKS



New FEATURES! New QUALITY! New VALUE!

You'll find everything in these new 1951 Chevrolet trucks—everything that has made Chevrolet the world's most popular make *plus* new features and improvements that put them still farther ahead of the field. As a truck user, you'll welcome Chevrolet's new, better designed brakes for their increased effectiveness . . . their thrifty long life and extra safety! You'll recognize important

contributions to trucking in Chevrolet's Dual-Shoe parking brake, the new Ventipanes, and Chevrolet's new cab seats . . . the very tops for riding comfort! See your Chevrolet dealer and take a good look at these 1951 Chevrolet trucks at your first opportunity. The "best in the business" are better than ever today! Chevrolet Motor Division, General Motors Corp., Detroit 2, Mich.

CHEVROLET ADVANCE-DESIGN TRUCK FEATURES

TWO GREAT VALVE-IN-HEAD ENGINES—the 105-h.p. Loadmaster or the 92-h.p. Thriftmaster—to give you greater power per gallon, lower cost per load • POWER-JET CARBURATOR—for smooth, quick acceleration response • DIAPHRAGM SPRING CLUTCH—for easy-action engagement • SYNCHROMESH TRANSMISSIONS—for fast, smooth

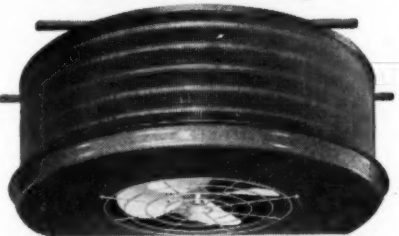
shifting • HYPOID REAR AXLES—for dependability and long life • NEW TORQUE-ACTION BRAKES—for light-duty models • PROVED DEPENDABLE DOUBLE-ARTICULATED BRAKES—for medium-duty models • NEW TWIN-ACTION REAR BRAKES—for heavy-duty models • NEW DUAL-SHOE PARKING BRAKE—for greater holding ability on heavy-duty

models • NEW CAB SEATS—for complete riding comfort • NEW VENTIPANES—for improved cab ventilation • WIDE-BASE WHEELS—for increased tire mileage • BALL-TYPE STEERING—for easier handling • UNIT-DESIGN BODIES—for greater load protection • ADVANCE-DESIGN STYLING—for increased comfort and modern appearance.



LOOK to LARKIN

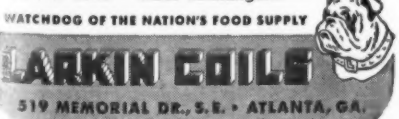
For Efficiency



LARKIN HALF-TURRET HUMI-TEMP

Efficient operation makes a product easier to sell on one hand; builds solid customer satisfaction on the other. Precision engineering—only the best materials—skilled craftsmanship—and almost 25 years experience in commercial and industrial refrigeration—all add up to higher efficiency for every Larkin product. And this means lower operating costs — important to buyer and seller alike.

Manufacturers of the original Cross-Fin Coil — Humi-Temp Units — Evaporative and Air Cooled Condensers — Air Conditioning Units and Coils — Direct Expansion Water Coolers — Steel Vacuum Plate Coils — Heat Exchangers.



REFRIGERATION SERVICE ENGINEERS!

"HALIE"

IS NOW IN PRODUCTION AND WILL SOON BE AVAILABLE FROM YOUR WHOLESALER

What's New

When requesting further information on new products, please use "Information Center" form.

Free Standing Dishwasher Announced by James Mfg.



KEY NO. A-120

INDEPENDENCE, Kans. — James Mfg. Co. here will display a new "free standing" model of its completely automatic electric dishwasher at the American Furniture Mart during the

January market, Stanley Silber, sales manager, announced recently.

Silber, who makes his headquarters in New York City, said the free standing model for permanent installation, because of its construction, can be installed for approximately \$25.

Specifications of the dishwasher have been changed somewhat from those announced in the Aug. 14 issue of AIR CONDITIONING & REFRIGERATION NEWS. The unit now takes 9½ minutes to complete its operation instead of seven minutes.

The James dishwasher features a patented "Sweepflow" washing principle that provides a solid wall of water rather than just a spray during the washing cycle. The water rises from the bottom of the unit to the top in a powerful revolving sheet that brushes and rubs the dishes as by hand.

Manufacturer's literature states that every drop of washing and rinsing water is automatically filtered before it passes over the dishes a second time. Coffee grounds, tomato seeds, and even starch particles are held in suspension at the bottom of the tub and are automatically expelled when the machine drains.

The cycle of operation is as follows: First, hot water cascades down from the top spray. Then the Sweepflow unit goes to work for a four-minute wash. The dishwasher drains automatically and two top rinses and two separate power rinses follow.

When the last rinse has been pumped away, the transparent lid pops open and the unit turns off automatically. Radiant heat contained in the dishes is reflected back to the dishes by the all stainless steel interior and dries them.

The dishwasher is equipped with parallel polished stainless steel racks that will hold 28 plates, saucers, and bowls; 24 glasses and cups; plus silverware.

The manufacturer claims that by using the Sweepflow principle, the James dishwasher will remove dried-on egg yoke from dishes, clean greasy pans, and sterilize small-mouthed bottles for babies. The complete washing and rinsing cycle is said to use less than 5 gals. of water.

The cabinet is rectangular and measures 18 by 25 in. The portable model stands 34½ in. high, the standard 36 in. high, and the built-in 29½ in.

The portable model is mounted on casters. Two hoses, the fill and drain, slip out of the control panel and snap to the sink. When finished, the hoses slip back out of view. A pump expels water into the sink.



Combination Includes Lavatory, Water Heater

KEY NO. A-121

WIXOM, Mich. — A new combination lavatory and water heater is currently being offered by Handling Equipment Mfg. Co. here.

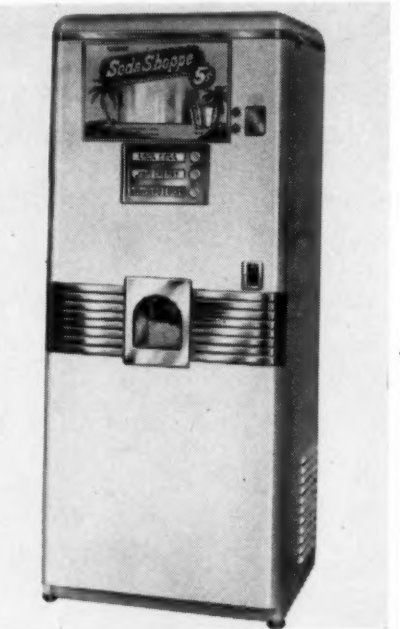
The lavatory is a white porcelain Briggs Beautyware unit with a mixing fixture that combines cold and hot water to the desired temperature.

The lavatory is mounted on an aluminum cabinet that contains an automatic Bowen electric water heater which is fully plumbed to the lavatory.

The heater is approved by Underwriters' Laboratories and is insulated with a 2-in. layer of Fiberglas. The thermostatic control turns on the current only as the hot water is used. The unit is said to have fast recovery and keeps the water hot for long periods without the use of electricity.

Installation requires water connections to cold water source and drain and plugging in the electric hot water heater, it was pointed out by the manufacturer.

'Jet Action' Carbonates, Cools Drinks In Dispenser



KEY NO. A-122

MINNEAPOLIS — A refrigerated automatic vending machine that will dispense three different flavors into paper cups has been introduced by the Automatic Products Co. located here.

Called the "Soda Shoppe," the unit features a jet carbo-cooler which is said to provide a jet action that instantly cools and carbonates water and cools syrup. The jet carbo-cooler is completely self-contained and triple insulated. It measures 11 in. in diameter and 18 in. in height, according to the company.

The Soda Shoppe can hold 1,000 cups and enough syrup for 1,800 drinks. The entire cabinet measures 67 in. high, 24 in. deep, and 27 in. wide. It weighs 530 lbs.

The manufacturer claims that this is the only cup drink dispenser that has an interior light. The unit is said to be so simply constructed that it requires no special training to service. The manufacturer said there are no complicated circuits and no critical adjustments.

The coin mechanism accepts nickels, dimes, and quarters. A changemaker is an optional accessory. Other optional accessories are a hot attachment and a non-carbonated attachment.

Good-Fellow Towers Offer Air, Water Counterflow

MEMPHIS — The E. D. Goodfellow Co., Inc., here, has announced the addition of a complete new line of centrifugal fan induced draft cooling towers to its present line of propeller fan towers.

The new towers may be had in the following sizes: 2, 3, 5, 7½, 10, 15, 20, 25, 30, 40, and 50-ton capacities. The company said the new product has been thoroughly field-tested.

Among announced features of the towers are counterflow of water and air, "W" shaped eliminators, deep staggered cypress decking "so designed as to hold the water in the air stream the required length of time for maximum efficiency," and one-piece non-clogging bronze spray nozzles.

Other features cited by the company are compactness, ready accessibility to all parts through use of access doors and easily removable panels, rugged construction, corrosion resistant covering inside and out, and grouping of all connections to equipment at the right front to facilitate installation and service, as well as making corner installations possible.

Smaller sizes are shipped in one completely assembled section and larger sizes in two assembled sections, requiring only that the two be bolted together on the job, according to the manufacturer.

Automatic Coffee Maker Uses Drip Method



KEY NO. A-123

RIVER GROVE, Ill. — What is claimed to be the first and only automatic drip coffee maker of its kind has been introduced by Dulane, Inc., here, manufacturer of the "Fryrite" automatic deep fryer.

Called "Coffyryte," the twin-bowl-type coffee maker has separate heating elements in both the upper and lower sections. The upper section is

equipped with a sensitive "Tempryte" flow valve which is controlled by the temperature of the water.

Cold water placed in the upper bowl is held there until the upper element has reached the ideal temperature for coffee making. Then the "Tempryte" opens and allows the heated water adjacent to the element to pass through the removable "coffee basket" where it is filtered before flowing into the lower bowl.

"Since it is unnecessary to heat all the water at once," the manufacturer said, "the upper bowl remains cool throughout and after the brewing process. In the lower bowl the coffee is kept at any desired temperature by the adjustable thermostat."

Since the water in the upper bowl flows through the coffee "within a few degrees of the scientifically correct temperature," all of the flavor and aroma is extracted but none of the bitterness, the company claims. It also claims that Coffyryte "is more economical, too, since accurate temperature control produces 20% more cups of pure coffee per pound."

The appliance, which is finished in chrome, retails at \$32.50.

2 More Allin Indicators Have Protective Seal Cap

KEY NO. A-124

CHICAGO — Two new ½-in. and ¾-in. sizes of Allin Liquid Eye indicators are now available with protective seal cap in addition to the standard ¼-in. sizes.

All sizes may be secured with male or female to male fittings or with solder connections.

The protective seal cap on the ½-in. and ¾-in. sizes is positioned on the tubular brass body and is knurled for easy unfastening and sliding back to view the liquid condition or sliding forward and screwing in place to seal off the ports.

Because of its unique construction, the seal cap cannot be lost or misplaced. It remains permanently on the line, unscrews easily by hand and slides back and forth without effort.

Its great value on larger lines is that it guards against all possibility of damaging the glass tube after installation, the company said.

Both the ½-in. sizes and the ¾-in. sizes are designed to minimize pressure drop by utilizing a larger diameter pyrex tubing which insures a full flow of refrigerant.

Both the ½-in. sizes and the ¾-in. sizes are designed to minimize pressure drop by utilizing a larger diameter pyrex tubing which insures a full flow of refrigerant.

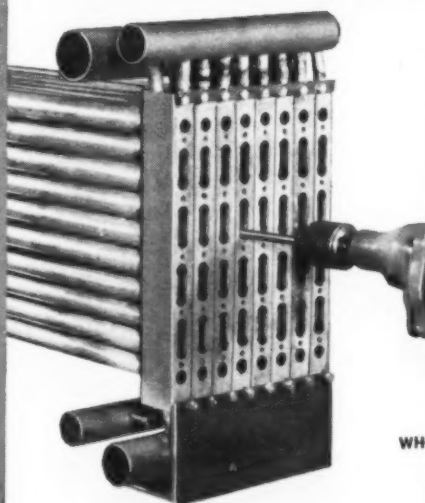
Both the ½-in. sizes and the ¾-in. sizes are designed to minimize pressure drop by utilizing a larger diameter pyrex tubing which insures a full flow of refrigerant.

More Efficient—CLEANABLE

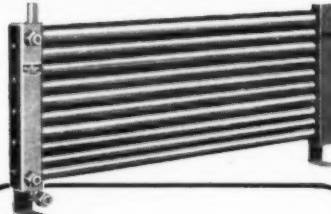
CONDENSERS



WATER-COOLED DOUBLE-TUBE COUNTER-FLOW DESIGN



½-TON to 25-TON CAPACITIES



Acceptance in the field is rapidly changing to "Demand" for these efficient, more economical Cleanable water-cooled Condensers. Owners and service men prefer the "new unit" efficiency that can always be maintained by a simple cleaning process. Brass headers are machined and brazed.

Write for Catalog and Prices.

WHOLESALE IN PRINCIPAL CITIES



Halstead & Mitchell

BESSEMER BUILDING • PITTSBURGH 22, PA.

Every American Family... NEEDS A SECOND, SMALLER REFRIGERATOR FOR THE HOME • OFFICE • COTTAGE • BOAT • RECREATION ROOM • SMALL APARTMENT, ETC.

A WIDE OPEN MARKET FOR DEALER PROFITS!

MARVEL Specialized REFRIGERATOR WILL MEET THIS CONSUMER DEMAND 100%

You can make extra profits when you add the MARVEL 400 to your present lines. There's a bigger market than you may realize for a really good 4-foot unit.

Requires only 23" x 20" floor space. Door opens full 90° even when unit is smack against the wall. Requires no side or back ventilation. Tecumseh hermetically sealed compressor. Underwriters approved!

Needed by doctors for refrigerating penicillin, sulfa, etc. Make multiple sales to apartment houses—both original equipment and replacements—cottages, resorts, etc.

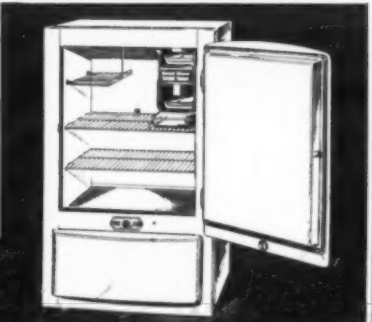
The ideal second refrigerator for the home—recreation room, shop, home bar.

Write FOR DEALER LITERATURE!

MARVEL INDUSTRIES, Inc. Sturgis, Mich.

The Result of 13 Years of Refrigeration Engineering

Marvel has built small, specialized refrigerators since 1937. Superb production facilities in our new, modern plant at Sturgis, designed and built exclusively for refrigerator manufacture. Every unit individually tested. Performance guaranteed.





NO LINT or moisture in room is feature being stressed in sales of Model LD-3 clothes drier.



MEDIUM PRICE on this refrigerator (Model ED87-5) will be big selling point due to large frozen storage space.



PUSHBUTTON CONTROLS on this range are prime feature since it is among first ones that Hotpoint has medium-priced.

minutes," can be set for periods up to 60 minutes. The ovens can be pre-set for longer periods required for roasting, baking, etc., and are controlled by a circular timer.

A circular light over the surface units matches the timer in styling, and illuminates the area where cooking is done.

The backsplash also has timed electric outlets for small appliances. The chromium grid in the broiler pans is included to increase the amount of reflected heat that is required for charcoal type broiling.

The RC-16 is a lighted pushbutton range in the medium price class, with styling similar to that of the top deluxe models. It has a single oven, and a fluorescent light that illuminates the four surface units. A companion model, RC-15, is identical in appearance except that the push-buttons are not individually lighted.

The RB45 is a double-oven range that is "priced for the first time in the medium bracket," Hotpoint said. It has rotary switches on the control panel, a new timer, and an incandescent lamp.

Other new models are the RB40, a "low-priced," full-sized range with three surface units and a deepwell cooker; the RB30 and RB34 apartment ranges with three and four surface units, respectively; and the RB42, a "low priced" model with three storage drawers.



The new "Disposal" is fastened to the sink by a simple locking arrangement so that the unit can be easily rotated to line up with existing plumbing. New styling with all wires concealed makes the unit suitable for floor and window displays.

It is about two inches shorter than older models, has a capacity of two quarts, and fits and 3 1/2 to 4-in. sink opening. The appliance is finished in metallic gray and white.

The Disposal is available in two models. The MW-6 can be installed in existing sinks or in new automatic dishwasher sinks. The MWP-6 is designed for use with pre-plumbed dishwasher models.

674,761 Unit Production At Kelvinator Corp. Sets New Record for Appliances

DETROIT—Nash-Kelvinator Corp. set new records for production, sales, earnings, employment, and payrolls in the fiscal year ended Sept. 30, 1950, George W. Mason, president, revealed in the company's 1950 annual report.

The Kelvinator division's output of household appliances reached a new high level of 674,761 units, an increase of approximately 9% over 1949. Total output of both household appliances and commercial products was 803,600 units, a gain of 14% over 1949.

Net sales of the corporation were 17% greater than in 1949, amounting to \$427,203,107 against \$364,193,360.

Net earnings amounted to \$30,536,326, or \$7.03 per share, after provision for state and Federal income taxes, but before provision for excess profits taxes. Net earnings in fiscal 1949 were \$26,229,930, or \$6.04 per share.

Mason explained that it was impossible when the annual report went to press to estimate the effect of the pending excess profits tax act on 1950 earnings. Progress of this legislation since that time has been such that it is now estimated that \$1,700,000 will be required for excess profits taxes.

Among other highlights of fiscal 1950 operations, Mason listed dividends of \$2.95 per share paid to stockholders against \$1.40 in 1949, average employment of 26,662 persons compared with 24,321 in the previous year, and an \$8,847,160 increase in salaries and wages paid to employees.

Net working capital at Sept. 30, 1950 amounted to \$80,823,385, an increase of \$9,001,385 for the year.

Jacksonville Meat Co. Opens New Air Conditioned Market

JACKSONVILLE, Fla. — Completely air conditioned, the Jacksonville Meat Co. has opened a new and modern supermarket at the corner of Post St. and Cassat Ave.

'51 Hotpoint Line Includes 9 Refrigerators, 8 Ranges--

(Concluded from Page 1)

"priced for the first time in the medium bracket," according to Hotpoint.

The garbage disposal unit can be connected to existing plumbing with an estimated 20% reduction in installation cost.

Shipments of the appliances to dealers are starting now.

The two new refrigerators noted above—the ED87-5 and ED110-5—have new full-width frozen food compartments with spring held insulated doors designed to keep proper freezing temperature while the refrigerator door is open. Capacity of this compartment is 43 lbs. in the 8.7-cu. ft. model, and 49 lbs. in the 11-ft. The refrigerator doors are equipped with shelves.

These 1951 models with door shelves, called "Super-Stor," are headed by two deluxe combination refrigerator-freezers in 8.7 and 10.6-cu. ft. sizes. These have separate doors to the refrigerator and freezer space that can be opened individually, maintaining proper temperatures in each compartment. The freezer section has a frozen food capacity of 52 lbs. in the smaller model, and 70 lbs. in the larger.

The fresh food compartment has cooling coils in the walls. Uncovered foods stored in the "moist-cold" refrigeration area will not dry out, it is claimed. Door shelves are said to help make nearly 75% of the contents accessible at the front of all "Super-Stor" models.

The deluxe boxes also have a built-in butter conditioner, two large vegetable pans, and a hinged left-over rack.

Other 1951 models are the EC8-2 which has a horizontal evaporator in the "low price" class; the EB81-5 and EA83-5 with conventional type evaporators; a "low cost" 6-ft. box, and a 4-ft. under-counter refrigerator for small homes and apartment house kitchens.

NEW FREEZERS DESIGNED TO MEET NEED FOR BIG MODELS

The two new home freezers in 15 and 23-cu. ft. sizes were reportedly developed to meet the increasing demand for larger sizes.

Edward R. Taylor, general sales manager, said a consumer survey made during 1950 indicated that more than half of all future sales will be in sizes of 12-cu. ft. or larger.

The EK-15 will hold 532 lbs. of frozen foods, and the EK-23 has a capacity of 808 lbs. Freezing capacity is 73 lbs. every 24 hours in the smaller appliance, and 130 lbs. in the 23-ft. model.

Both models have a compartment located above the freezing unit. The user can freeze food in this section without disturbing other stored articles, and later transfer them to the baskets in the storage cabinets. It has a 3.3-cu. ft. volume and a capacity of 116 lbs.

The 23-ft. freezer has two counter-balanced lids so that only one section of the appliance need be opened at one time. Both models have hermetically-sealed freezing units, lighted alarm signals that indicate the temperature has risen 15°, and interior lights.

Other freezer models are in 8 and 11-cu. ft. sizes. The EK-8 will hold 280 lbs. and the EK-11 has a capacity of 389 lbs.

The new automatic electric tumbler clothes drier uses what Hotpoint calls "the revolutionary principle of condensing moisture from the heated air by means of a fine spray of cold water."

HOW THE NEW DRIER WORKS

Operation of the drier (model LD-3) was explained as follows:

"Air is heated by passing over electric units similar to those on the cooking surface of an electric range. As the heated air circulates from the motion of the rotating clothes drum, it passes through a fine jet of cold water. This condenses the warm water vapor from the air, and also washes out the lint.

"All lint and moisture are then pumped from the appliance through a rubber hose to the nearest sink or drain outlet. The filtered air then passes over the heating units, and the cycle is repeated.

"Once the door is closed, the air inside is continuously heated and filtered, obsoleting the blower principle of drawing in air and discharging it into the room. This means that air in the hermetically sealed unit is purified by heating and filtering. Thus, dirt and dust do not get into the clothes once the automatic drying cycle begins."

The machine is controlled by two dials—one an automatic time setting from 15 to 60 minutes; the other giving a selection of high, medium, or low heat. Other features are a 14-in. opening and a capacity of 8 lbs. This is said to be sufficient to accommodate a full load of clothes from the LC-3 automatic washer, which the new drier matches in styling.

Cost of operating the new drier is put at approximately 10 cents a load, including electricity and water for the jet spray. The machine shuts itself off when the drying cycle is completed.

MORE PUSHBUTTONS IN TOP RANGE MODELS

Taylor said the new styling in the top range models accentuates automatic pushbutton control. The RD11 and RD10 are double and single oven models, respectively, with high control panels mounting lighted push-buttons to the right.

Each of the four surface cooking units, as well as the ovens, has a set of five buttons that light up in different colors to register the selected heat setting. A two-speed electric time measure, "accurate to the second, for periods up to 12-

Information Center

Here is an easy, convenient way for you to get more information on "What's New" items and on products advertised in this issue of AIR CONDITIONING & REFRIGERATION NEWS. New literature and catalogs available to readers can also be obtained by using the form below. Your requests for this information will be forwarded promptly by the NEWS.

In requesting additional information on "What's New" and "Current Literature Available" items, please use Key Nos. shown on these items.

Please send me more information on the items listed:

No.	No.	No.
No.	No.	No.
No.	No.	No.
No.	No.	No.
No.	No.	No.
No.	No.	No.

Products Advertised

(Please list name, page, and issue date)

Name
 Street
 City Zone State
 Company
 Title
 Type of Business (Dealer, contractor, etc.)
 (PLEASE PRINT PLAINLY)

CUT OUT THIS FORM AND MAIL TO:

AIR CONDITIONING & REFRIGERATION NEWS

Reader Service Dept.

450 W. Fort St., Detroit 26, Mich.

For More Than 1,000 Models

No "modifying", no fussing, no delays when you use Cutler-Hammer "specific-fit" replacement control units which C-H not only catalogs but has in stock for more than 1,000 individual models of refrigerators built since 1925.

9502N417 C-H "specific-fit" for Briggs 1937 models

9521N95 C-H "specific-fit" for Copeland 1939 models

9502N387 C-H "specific-fit" for Norge 1932-33 models

9521N11 C-H "specific-fit" for Leonard 1937 models

9521N158 C-H "specific-fit" for Crosley 1940-1947 models

CUTLER-HAMMER
MOTOR CONTROL
C-H

Featured by Cutler-Hammer refrigeration wholesalers and recommended by alert service dealers from coast to coast.



TV audiences in Detroit were given a treat recently when the Detroit Skating Club formally dedicated its new indoor ice rink (one of the few privately owned in the country), and the enterprising contractor who had made the installation decided to sponsor a half-hour telecast of the event. First act was this cartwheel on ice which followed the introduction and first "plug" for the Charles R. Beltz & Co. and Airtemp, who completed the rink a few months ago.



This was the scene behind the television cameras as the show went on. Note the "props" at right for the "live" commercial promoting a conversion oil burner.



One of the stars of the show was a figure skater of international fame, Virginia Baxter, who is a member of the Detroit Skating Club as is her father.



On hand to greet the mobile transmitter from the TV station was Charles R. Beltz (right), the contractor sponsoring the telecast, who at one time cut considerable ice as a speed skater.



Lovely Beverly Logan, who won a "Miss Venus" contest last fall, also fascinated the TV audience with a demonstration of baton-twirling on ice.

He TELEVISES His Installation!

Detroit Contractor Who Installed Ice Rink Sponsors Telecast of Nine-Act Skating Exhibition Staged There

DETROIT—An unusual promotion of an unusual installation was staged recently by Charles R. Beltz & Co., enterprising air conditioning contractor here, when the Detroit Skating Club formally dedicated its new ice rink recently.

Nine acts of skating exhibitions had been programmed by members of the club, so Beltz arranged to sponsor a TV show direct from the rink, which his organization and Airtemp Construction had installed some months previously.

"The half-hour show brought enthusiastic response," Beltz indicated. "The skating club itself received more than 100 requests for membership, and we received more than 50 calls immediately afterwards as did the TV station."

In addition, the firm received considerable publicity in the television and sports pages of the local daily newspapers as well as on radio broadcasts.

The rink, which was described in detail in the March 6, 1950, issue of AIR CONDITIONING & REFRIGERATION NEWS, provides a skating surface 176 ft. long by 76 ft. wide in a large structure that was formerly an indoor riding arena. One of the few privately owned rinks in the country, it is powered by two 30-ton "Freon-12" Airtemp radial condensing units.

These units were unusual in that each was pre-fabricated at the factory into a framework complete with an Acme brine chiller to simplify installation.

"Commercials" to plug Beltz and Airtemp were interspersed throughout the skating exhibitions, use being made of flip cards, a movie, and one "live" commercial. The latter consisted of a conversion oil burner fixed up with streamers to simulate flames when the burner motor was switched on.

The program started off with a commercial explaining who was sponsoring the show, done by means of flip cards. These, however, were superimposed upon a shot of Virginia Baxter, young member of the club with international ranking as a figure skater, doing a spin. Included in the various acts were large groups, a baton twirler, two young children, and the like.

Midway in the program was shown a short Airtemp-produced film, which incidentally included scenes photographed at the Beltz offices and showrooms. The final commercial was the oil burner.

Air Conditioning Is Included In Plans for Remodeling Cafe

GREENSBORO, N. C.—At a cost of between \$75,000 and \$100,000, the Mayfair cafeteria will remodel its three-story building at the corner of North Elm and Gaston Sts. Owner Boyd Morris said improvements include the installation of a new air conditioning system.

Indoor Comfort Meetings for First Half of '51 Listed

CLEVELAND—The National Warm Air Heating and Air Conditioning Association announces that 33 Indoor Comfort conferences have been scheduled during the first six months of 1951.

As with previous conferences sponsored by the association, the 1951 classes will bring to those attending first-hand information about the results of 33 years' continuous research, plus the results of the surveys conducted by the Field Investigation Committee, and the opportunity to gain new ideas from the experiences of successful heating men throughout the country.

Guy A. Voorhees, technical secretary of the association, will continue to instruct the 1951 conferences and is currently preparing and revising the instructional material to bring it up-to-date. Of special interest will be the new short form for estimating jobs which will be introduced at the conference by Voorhees.

The instructional material of the two-day heating school will lead off with a short review of the basic principles for warm air heating and the methods of figuring heat loss. The greatest portion of the class time will be devoted to the discussion of heating systems for low-cost houses.

Covered in this instruction will be the design and installation of winter air conditioning systems that provide indoor comfort in basementless houses. Time will also be spent in discussion of the proper location of registers and return-air intakes to put the heat where it will give the most comfort.

The registration fee for the two-day conference is \$12.50 per student. The fee includes tuition and the cost of all manuals and worksheets that the student will receive for classroom instruction.

A listing of the conferences scheduled follows:

Jan. 11-12—Indianapolis, Ind.; Jan. 18-19—Peoria, Ill.; Jan. 22-23—South Bend, Ind.; Jan. 29-30—Youngstown, Ohio; Feb. 1-2—Columbus, Ohio; Feb. 5-6—Memphis, Tenn.; Feb. 9-10—Birmingham, Ala.; Feb. 13-14—Atlanta, Ga.

Feb. 16-17—Knoxville, Tenn.; Feb. 19-20—Charlotte, N. C.; Feb. 23-24—Huntington, W. Va.; March 5-6—Houston, Tex.; March 8-9—Oklahoma City; March 12-13—Tulsa, Okla.; March 19-20—Kansas City, Mo.; March 22-23—Salina, Kans.; March 30-31—Boston.

April 2-3—New Haven, Conn.; April 5-6—Long Island, N. Y.; April 9-10—Philadelphia; April 13-14—Baltimore, Md.; April 17-18—Utica, N.

Y.; April 26-27—Rockford, Ill.; April 30-May 1—Milwaukee.

May 3-4—Minneapolis; May 7-8—Billings, Mont.; May 11-12—Omaha, Nebr.; May 14-15—Des Moines, Iowa; May 21-22—Evansville, Ind.; May 25-26—Fort Wayne, Ind.; May 28-29—Detroit; May 31-June 1—Saginaw, Mich.; June 4-5—Kalamazoo, Mich.

7 Appointed to Life Membership In ASHVE

NEW YORK CITY—Lester T. Avery, president of the American Society of Heating and Ventilating Engineers, announced the election of seven life members of the society.

Those honored are: Harold L. Alt, Baltimore, Md.; Earle S. Burnett, Amarillo, Tex.; Luther D. Emmert, Chicago; John J. Waltherthum, New York City; Orion O. Oaks, Somerville, N. J.; Louis A. Welch, Jr., Schenectady, N. Y.; and William K. Simpson, Waterbury, Conn.

Kipp Gets Charter In W. Va.

CHARLESTON, W. Va. — Kipp Electric & Air Conditioning Co., here, has been granted a charter by the Secretary of State. The incorporators were Richmond Walters, Mitchell Schwartz, and Marcia Samuels.

TYPHOON

Most Complete Line of AIR CONDITIONERS in the most popular size range 1½ TO 20 TONS

Evaporative Condensers 3 TO 20 TONS

Backed by more than 40 years of air cooling experience



TYPHOON Air Conditioning Co., Inc.
794 Union Street, Brooklyn, N. Y.

WE WILL BUY!

EXPANSION VALVES SOLENOID VALVES, ALL TYPES REF. FITTINGS and PARTS

ANY QUANTITIES • MUST BE NEW

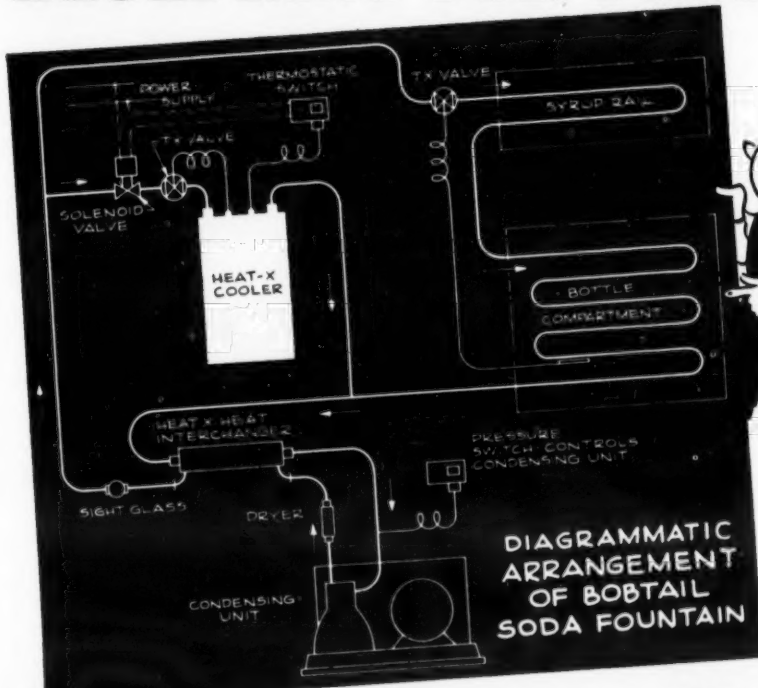
Write, Phone Or Call For IMMEDIATE ACTION

TRACO Industrial Corp.

455 W. 19 St., N. Y. 19, WAtkins 4-4302

(Send for Traco's complete list of sensational bargains)

BLUEPRINT FOR PROFIT



heat-x FOUNTAIN COOLER

The simple, common-sense construction of Heat-X Fountain Coolers insures minimum maintenance and positive protection against freeze-up damage. Cast within the aluminum block are (1) a stainless steel coil for soda, (2) a copper (or stainless steel) coil for water, and (3) a copper coil for refrigerant. No surge tank or oil separator is required. The hook-up for a bobtail soda fountain is shown in the diagrammatic sketch above.



Write Dept. SE for Specification Sheet

THE HEAT-X-CHANGER CO., INC.

250 East 43rd Street, New York 17, N. Y. • Brewster, N. Y.

A New Sales-Profit Leader!

ADD GERM-CONTROL

To HEATING and AIR CONDITIONING SALES

The **Glycolator**
REGAL PORTABLE

Reduces air-borne virus and bacteria to safe level by saturating air with odorless vapors of triethylene glycol. Fully automatic, fan dispersion, lightweight, portable. Treats up to 100,000 cu. ft. of air per hour.

FORCED AIR FURNACE MODEL

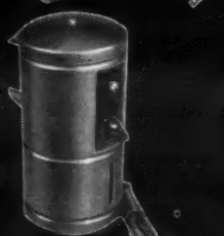
Continuous vaporizer for mounting in forced air stacks of warm air furnaces. Treats up to 20,000 cu. ft. of air per hour. Thermostatically controlled. Low cost. Easily installed.

COMMERCIAL VENTILATING MODEL

Large capacity model designed to treat commercial quantities of air on year 'round basis. Installs directly in circulating air system. Various styles depending upon volume requirements.

DEALER & DISTRIBUTOR OPPORTUNITY

Territories for distributors and dealers are open. For more information on the products and method and sales plans write on your letterhead.



Glycolator
DIVISION

IRON CITY CHEMICAL CO.
Valencia, Pa.

Companies Scheduled To Exhibit at American Furniture Mart

Name	Space
A & J Mfg. Co.	548
Admiral Corp.	526, 527
Allen Mfg. Co., Inc.	510-B
Archer Bros. Co.	541, 542
American Stove Co.	518
Appliance Mfg. Co.	510-A
Armstrong Products Co.	17/63
Atlanta Stove Works	624
Automatic Washer Co.	503
Boston Corp.	549-A
Budix Home Appliances Div.,	
Avco Corp.	539-A
Ben Hur Mfg. Co.	528
Blackstone Corp.	544-A
Caspar Stove Corp.	519
Clements Mfg. Co.	17/68
Cole Hot Blast Mfg. Co.	17/73-74
Coleman Co., Inc.	525
Conlon-Moore Corp.	504
Coronaire Heater Corp.	17/M
Crown Stove Works	531
Deepfreeze Appliance Div.,	
Motor Products Corp.	17/L
Detroit Vapor Stove Div.	513-B
Dormeyer Corp.	2953
Duo-Therm Div.	517
Empire Appliance Co.	17/32
Estate Stove Co.	523
Evans Products Co.	541-B
Fresh'nd Aire Co.	17/105
Frigidaire Div.	508, 509-A
General Air Conditioning Corp.	17/64
General Electric Co.	535, 536, 537-A
Gibson Refrigerator Co.	537, 538-B
Grand Home Appliance Co.	17/J-31
Gray & Dudley Co.	515-B
Hamilton Mfg. Co.	1420
Holland Rieger Div.,	
Apex Rotarex Corp.	17/98, 99
Hoover Co.	544-B
Horton Mfg. Co.	511-A
Hotpoint, Inc.	533, 534, 535-B
Ideal Steel Products Co.	17/Q-116, 117
International Harvester Co.	510-A
International Oil Burner Co.	512-A
Ironrite, Inc.	511-B

McGraw To Channel All Materials to Toastmaster

CHICAGO — To conserve scarce metals for use in the production of its most popular item—the toaster—Toastmaster Products division of McGraw Electric Co. here has stopped production on its waffle bakers, waffle servers, and hospitality sets.

W. E. O'Brien, general sales manager, said the company's supply of these three items is exhausted and "no more will be available for the time being."

He added, "We propose to allocate our production equitably among our distributors, as has been our custom, and anticipate completing all quotas by the end of March and possibly before then."

Ptacin Is Assistant To Admiral Ad Director

CHICAGO—Joseph J. Ptacin, former advertising auditor for Admiral Corp., has been named assistant to Seymour Mintz, advertising director, who announced the appointment.

In his new capacity Ptacin will be in charge of space buying for the company's national advertising in newspapers and magazines, both general and trade. He joined Admiral in 1943, in 1947 becoming personnel manager. In 1949, he was promoted to advertising auditor. In his new position he will take over the former duties of John W. Walt.

Tappan Buys O'Keefe & Merritt West Coast Gas Range Firm

MANSFIELD, Ohio—Purchase of the O'Keefe & Merritt Co. of Los Angeles for \$5,000,000 in cash and stock was announced here recently by A. P. Tappan, president of the Tappan Stove Co. Both firms make gas ranges.

D. P. O'Keefe, president of the west coast firm, who joined in announcing the purchase, will remain at his post.

Merritt Issues New Circular

PASADENA, Calif.—A new descriptive circular for its complete line of transparent lids for ice cream cabinets is now being distributed to the trade by R. K. Merritt & Associates here.

List of Exhibitors For Merchandise Mart

Name	Space
American Central Div.	1476
Apex Rotarex Corp.	1472
Associated Products Co.	1433-A
Berger Co., Inc., T. W.	1454
Bersted Mfg. Co.	1467
Carrier Corp.	1186
Casco Products Corp.	1175
Cooler Corp.	11-107
Crosley Div.	1133
Dearborn Stove Co.	1490
Deepfreeze Div.	1447
Dexter Co.	14-103
Dominion Electric Mfg. Co.	1422
Easy Washing Machine Corp.	1464
Eldredge Sewing Machine Co.	1468
Elgin Steel Kitchens	1454
Estate Heatrola Div.	1418
Eureka Williams Corp.	1161
Everedy Co.	11-112
Farber, Inc., S. W.	1419-A
Fasco Industries, Inc.	1422
Florence Stove Co.	1458-9
Free Sewing Machine Co.	1450

General Electric Co.,	
Air Conditioning Div.	1127
General Mills, Inc.	1453-A
Glascock Bros. Mfg. Co.	1454
Hobart Mfg. Co., KitchenAid Div.	1492
Hotpoint, Inc.	1456-57
Johnson & Son, Inc., S. C.	1158
Jordon Refrigerator Co.	14-101
Kisco Co.	14-104
Knapp-Monarch Co.	1483
Landers, Frary & Clark	1479
LaSalle Lighting Products, Inc.	
Heater Div.	1492
Lauder, Ray S.	1433-A
Lewis Engineering Mfg. Co.	1178
Manning, Bowman & Co.	1466
Martin Co.	14-104
McCreedy Cabinets, Inc.	14-101
Metal Ware Corp.	1411-A
Mullins Mfg. Corp.	1119
Mutschler Bros. Co.	1125
National Electric Washer Co.	14-101
National Enameling & Stamping Co.,	
Electric Div.	1422
National Sewing Machine Co.	1468
New Home Sewing Machine Co.	1450
Norge Div., Borg-Warner Corp.	Plaza
Nutone, Inc.	1451
Peerless Mfg. Corp.	1485
Perfection Stove Co.	1475
Proctor Electric Co.	1473
Rasmussen & Co., J. H.	1454
Revco, Inc.	1454

Rittenhouse Co.	14-104
Rival Mfg. Co.	1454-A
Royal American Corp.	1171
Rutenber Electric Co.	14-107
Samson United Corp.	14-104
Sanford Co., D. E.	1405
Schaefer, Inc.	1188
Sessions Clock Co.	1409
Silex Co.	14-109
Sparton Co.	1163
Sperli-Faraday Corp.	1422
Stoddard Mfg. Co.	1111
Sun-Chief Electric, Inc.	1414
Sunroc Co.	1177
Superior Electric Products Corp.	11-116
Swartzbaugh Mfg. Co.	1498
Taylor Corp.	14-101
Taylor Instrument Cos.	11-106
Telechron, Inc.	1440
Toastmaster Products Div.	1455
Tracy Mfg. Co.	1142-3
Utilitex Corp.	1420
Verick Electric Mfg. Co., Inc.	11-116
Waring Products Corp.	1405
Washburn Co.	1123-A
Wiley Organization, Inc., Joseph H.	14-101

Ted Shields Files Name

BUFFALO—A business name has been filed in the Erie County clerk's office for Ted Shields Refrigeration Service.

CONTEST DEADLINE EXTENDED BY NEWS

March 1 Is New Closing Date

MANY REQUESTS FOR MORE TIME PROMPT SIX WEEKS ROLL BACK

Busy Holiday Season Stymies Dealers

Deadline of the \$1,000 contest for the most unusual air conditioning application installed by a contractor or dealer has been extended from Jan. 10 to March 1, 1951 to enable the many contestants with prize-winning possibilities to polish off their entries and qualify for the many fine prizes in this worthwhile competition.

As the purpose of the contest is to point up today's "unusual" applications that can be developed into thriving and profitable markets for air conditioning dealers and contractors tomorrow, the NEWS decided to extend the contest time.

Many dealers had told the NEWS that they would like to enter the contest but were pressed too greatly over the holiday season by both personal and professional business to prepare entries.

Response to the contest to date by individuals, manufacturers, and industry associations has been gratifying.

Now—with this extra time—we urge you to submit your entries without delay.

It's easy to qualify!

The contest is divided into three divisions with a complete set of prizes for each division. You may enter all three divisions and possibly be a prize winner in each one! They are:

1. Room Cooler.
2. Packaged Unit.
3. Central System.

\$100 First Prize in each division. \$50 Second Prize. \$25 Third Prize. Ten prizes of \$10 each in each division and copies of George F. Taubeneck's latest "laugh-learn" book, "Both Feet on the Ground" to the next 12 best entries. Seventy-five prizes in all! Duplicate prizes will be awarded in case of ties.

HERE ARE THE SIMPLE RULES:

1. Submit picture of installation to show unusual aspects.
2. Write brief, complete description including: Customer's name, address. Type, name of air conditioning equipment used. What job equipment is intended to do. In what way is application unusual? What were installation problems, if any? How was sale made?
3. Mail picture, description to
CONTEST EDITOR,
AIR CONDITIONING &
REFRIGERATION NEWS,
450 W. Fort St., Detroit 26, Mich.

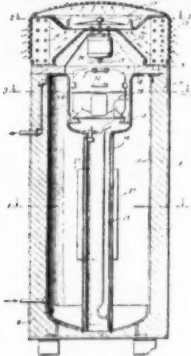
All air conditioning contractors, dealers, and their employees are eligible to enter.

Send us your entries as soon as possible. All entries submitted by midnight, March 1, will be eligible to win!

PATENTS

Week of July 18
(Continued)

2,516,094. HEAT PUMP WATER HEAT-ER. Alonzo W. Ruff, York, Pa., assignor to V. C. Paterson & Associates, Inc., York, Pa., a corporation of Pennsylvania. Application May 17, 1949, Serial No. 93,812. 11 Claims. (Cl. 62-129.)



1. A water heater of the heat pump type, in which a refrigerant is used as the working fluid, comprising in combination: a hot water storage tank; a refrigerant evaporator unit mounted on said tank and adapted to absorb heat from the air at the prevailing room temperature; heat transfer means of the type in which refrigerant is circulated, said means being mounted in heat conducting relation with a wall of said tank and extending substantially from top to bottom thereof; a motor compressor unit mounted in heat exchange relation to the water in said tank; closed fluid conduits extending between said compressor and the evaporator and heat exchanger to enable the compressor to pump gaseous refrigerant at low pressure from said evaporator and deliver said refrigerant at high pressure to the top of said heat exchanger; a closed conduit for the refrigerant connecting the bottom of said heat transfer means to said evaporator; and means responsive to the temperature of the water in said tank to control the transfer of heat thereto.

DESIGNS

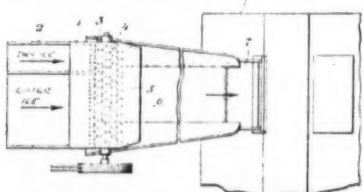
159,365. REFRIGERATOR TRAY. Joshua Gordon Lippincott, Scarsdale, N. Y., assignor, by mesne assignments, to Bridgeport Moulded Products, Inc., Fairfield, Conn.



The ornamental design for a refrigerator tray, substantially as shown.

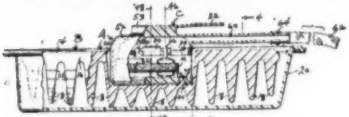
Week of July 25

2,516,166. REFRIGERANT MIXTURE AND METHOD OF REFRIGERATING CARS AND OTHER ENCLOSED SPACES THEREWITH. Sol B. Wiczer, Washington, D. C. Application Sept. 25, 1946, Serial No. 699,355. 8 Claims. (Cl. 62-1.)



1. Method of salt icing the ice bunkers of a refrigerator comprising evenly mixing a major proportion of fragments of water ice with minor proportions of Dry Ice and salt in any sequence and adding the mixture to the ice bunkers.

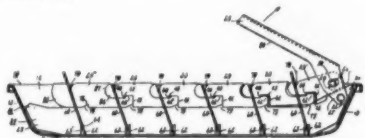
2,516,232. AGITATING DEVICE FOR MAKING FROZEN DESSERTS. William B. McGorum, Pelham, N. Y. Application Dec. 31, 1948, Serial No. 68,705. 13 Claims.



1. In combination with a receptacle containing a mixture to be frozen, an agitator unit shiftable carried in the receptacle, said

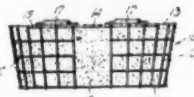
agitator unit being provided with a plurality of spaced dasher blades having their lower ends lying on an arc whereby to permit rocking movement of said agitator unit in at least one direction in the receptacle, and power driven actuator means for imparting shifting and rocking movements to said agitator unit while the mixture is freezing in the receptacle.

2,516,257. FREEZING TRAY. Frederick W. Sampson, Dayton, Ohio, assignor to General Motors Corp., Detroit, Mich., a corporation of Delaware. Application Feb. 14, 1948, Serial No. 8,351. 7 Claims. (Cl. 62-108.5.)



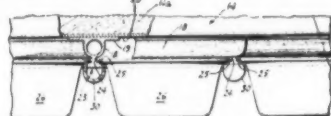
1. A partitioning grid for a freezing tray, said grid comprising: a main wall comprising a lower section and a plurality of relatively movable upper sections, force-multiplying means reacting upon said lower section for pulling said upper sections longitudinally relative to said lower section, one of said upper sections having a mutual lost-motion interconnection with the next succeeding upper section pulled thereby such that said succeeding section is moved only after such movement of its preceding upper section as to take up the lost motion in the interconnection therebetween, and a plurality of cross partitions each having its lower portion retained in a notch in said lower section and having its upper portion retained in a notch in one of said upper sections so as to be moved thereby.

2,516,340. AIR PURIFIER. Pasquale M. Pirchio, Clay Township, St. Joseph County, Ind., assignor of one-third to George E. Rohrbach and one-third to Jerome J. Sechowski, both of South Bend, Ind. Application Feb. 20, 1945, Serial No. 578,873. 9 Claims. (Cl. 183-45.)



1. In an air purifier adapted to be positioned in a duct, an apertured resilient carrier for purifying media comprising a base and spaced side panels and inwardly projecting yielding members connecting the marginal portions of adjacent panels spaced from said base.

2,516,586. REFRIGERATION SYSTEM. Frank D. Peltier, Jenkintown, Pa., assignor to Philco Corp., Philadelphia, Pa., a corporation of Pennsylvania. Application Nov. 1, 1947, Serial No. 783,487. 2 Claims. (Cl. 62-126.)

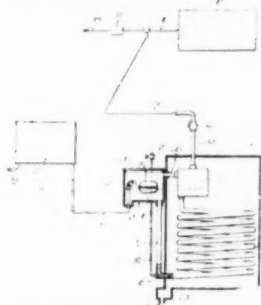


2. In a refrigerator, a storage compartment including an evaporator mounted adjacent the top wall of the compartment and lower portions of which would normally be exposed within said compartment, said evaporator including metallic tubing and integral flanging extending therefrom and forming channels depending from said tubing into a position in which surfaces of said flanging would normally be exposed within the compartment, cover means comprising ice trays removably carried by said channels in close adjacency to said evaporator and arranged in high heat conducting relation with respect to said lower portions, said ice trays precluding direct contact between the said portions and the air in said compartment, and means of low thermal conductivity covering the exposed surfaces of said flanging and thereby preventing deposition of moisture upon said surfaces.

Week of Aug. 1

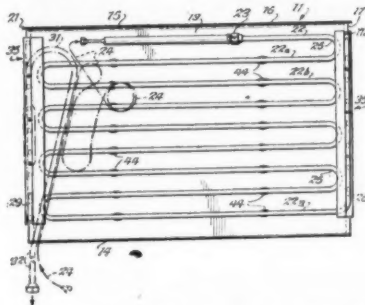
2,517,156. EVAPORATIVE COOLER. Bruno J. Zapart, Chicago, Ill., and Rudolph A. Mack, Phoenix, Ariz. Application Aug. 24, 1945, Serial No. 612,426. 6 Claims. (Cl. 62-169.)

1. A refrigerating device adapted to be operated by an internal combustion engine having suction intake means, a suction line adapted for connection with the suction means, a surface cooling element having upper outlet and lower inlet end portions with said upper end portion



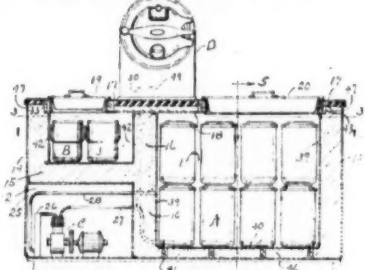
connected with the suction line, a supply tank, a pipe extending downwardly from the supply tank to the inlet end portion and connected therewith, said inlet end portion being inclined upwardly from said connection with the supply pipe, and an eduction tube located in said inclined tube and terminating inside the inlet end at a point away from the point of connection of the supply pipe therewith, and means for supplying a gaseous fluid to the eduction tube.

2,517,212. REFRIGERATION EVAPORATOR. Clare H. Kafer and Howard D. White, Adrian, Mich., assignors to Revco, Inc., Deerfield, Mich. Application Oct. 31, 1945, Serial No. 625,798. 5 Claims. (Cl. 257-208.)



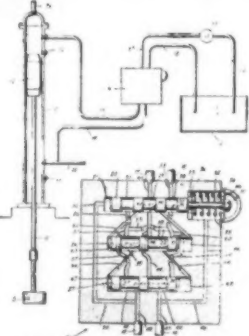
1. An article of the class described comprising a sheet metal container having a plurality of walls disposed at angles to each other, an outwardly directed flange between adjacent walls at the junction thereof, a convoluted coil having portions positioned transversely of each of said walls, adjacent portions of the coil on each wall being interconnected by return bends, and a clamp having an internal flange portion secured to said outwardly directed flange and wing flanges directed inwardly towards each of said adjacent walls and engaging the return bend portions of the coil on both walls.

2,517,234. FREEZING, HARDENING, AND DISPENSING CABINET AND CONTAINERS THEREFOR. Louis A. M. Phelan, Beloit, Wis. Original application July 27, 1940, Serial No. 347,830. Divided and this application Sept. 25, 1944, Serial No. 555,702. 3 Claims. (Cl. 62-99.)



1. A device of the character described comprising in combination, a counter freezer, a horizontally elongated hardening and dispensing cabinet, a compartment rectangular in horizontal and longitudinal cross section occupying a space in the cabinet extending from one end past the longitudinal center of the cabinet and being adapted for the reception of containers, a second compartment at the bottom of the other end of said cabinet and being separated from the first compartment by means of an insulated partition, a compressor unit in said second compartment, evaporator coils operatively connected to said compressor unit and positioned in heat exchange contact with said first compartment, a third compartment positioned above said second compartment and having substantially the same horizontal length and width as the second compartment and being surrounded horizontally by insulated walls and having an insulated bottom, a transverse permanent insulated covering on the top of said cabinet and extending a short distance longitudinally of said cabinet over said first and third compartments, said counter freezer being mounted on said transverse covering and having an operating connection with said compressor unit, insulated removable lids forming coverings for the remainder of the tops of said first and third compartments, the remainder of said first compartment being insulated from the exterior.

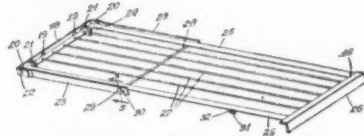
2,517,243. PRESSURE CONTROLLED PUMP OPERATING VALVE MECHANISM. Howard E. Rose, Peninsula, Ohio, assignor to Alco Valve Co., University City, Mo.



In a pump operating mechanism, a device adapted to be moved back and forth, a first fluid line connected to one side of

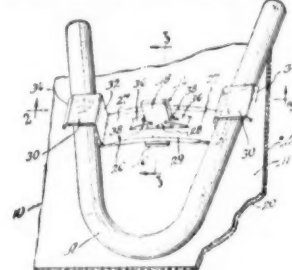
the device, a second fluid line connected to the other side of the device, a high pressure fluid line and a low pressure line, and a reversing valve mechanism connected to the four lines, said valve mechanism being adapted to connect the high pressure fluid line to the first fluid line and the low pressure line to the second fluid line, and means in the reversing mechanism responsive to predetermined pressure in the first pressure line, to reverse the connections and connect the first fluid line to the low pressure line and the second fluid line to the high pressure line, said means including a first valve movable to select one or the other of the connections aforesaid, and fluid pressure means to move the first valve, said last means including a pressure-responsive device connected by the first valve to receive oppositely the pressures of the two fluid lines, and oppositely shiftable when the difference in said pressures in said lines attains a predetermined value, and means operated by shifting of said device, for effecting the movement of the first valve to reversing position, said means including a pilot valve operated by operation of the pressure-responsive device, and means to prevent displacement of the first valve prior to full movement of the pilot valve.

2,517,385. FOLD-AWAY SHELF FOR REFRIGERATORS OR THE LIKE. Adna R. Clark, Evansville, Ind., assignor to International Harvester Co., a corporation of New Jersey. Application April 4, 1947, Serial No. 739,446. 4 Claims. (Cl. 211-150.)



1. A fold-away shelf construction for a refrigerator cabinet or the like having side walls and a rear wall, comprising: a support; means for connecting the support to the rear wall; means on the support providing a pair of horizontally spaced apart pivot ears and at least two notched locking ears positioned intermediate the spaced apart pivot ears; a pair of parallel straps; means including pivots aligned on a horizontal axis connecting the rear end of each strap member respectively to the pivot ears, the front ends of the straps being free; a generally rectangular, fold-away shelf positioned between the straps and capable of assuming either a horizontal or a vertical position, said shelf having opposed side edges and opposed end edges, the side edges lying closely proximate, respectively, to the straps; means on each side edge pivoting said edge on a horizontal axis to the free end of the proximate strap; means on the rear end edge of the shelf releasably engageable with the aforesaid notched locking ear for supporting one end of the shelf when the shelf is in horizontal position; and means on one of the side walls remote from the strap pivot means for supporting the front portion of the shelf when the shelf is in horizontal position.

2,517,411. FASTENER FOR REFRIGERANT EVAPORATOR. Charles F. Patterson, Wilmette, Ill., assignor to Admiral Corp., Chicago, Ill., a corporation of Delaware. Application July 8, 1946, Serial No. 682,082. 7 Claims. (Cl. 62-126.)

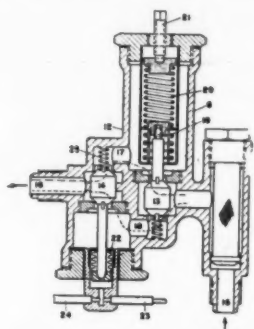


1. In a refrigerator which includes an enameled liner and an evaporator coil disposed in contact therewith, means for holding the tubing of said coils in position on said liner comprising, in combination, a stem projecting from the surface of the liner and having a coating of enamel continuous with that of the liner, and a resilient clip having an opening through it dimensioned to receive said stem, said clip having a tang adjacent to the opening in position to be flexed by the entry of said stem, with the end of the tang engaging said stem, and said clip having a portion at a distance from said opening bearing against the outer surface of the tubing, the pressure exerted by said clip being set so as firmly to hold the tubing against the liner without damage to the enameled surface thereof.

2,517,498. AIR CONDITIONING SYSTEM. William Loughney McGrath, Syracuse, N. Y., assignor to Carrier Corp., Syracuse, N. Y.

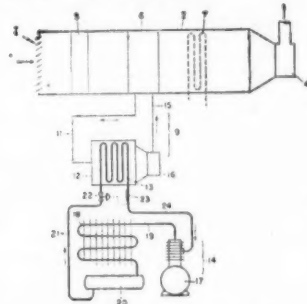
1. In a system of the character described, the combination of a plurality of units for conditioning air, a supply of conditioning medium, a passageway for supplying conditioning medium from said supply to said units, means for imposing a predetermined pressure on the conditioning medium in said passageway, and a plurality of valves in said passageway for controlling the circulation of conditioning medium through said units, at least one of said valves including a change-over element responsive to pressure of conditioning medium entering the

valve, means for changing the pressure imposed on the conditioning medium in said passageway, means for causing said element to assume a first position, said



element being adapted to assume a second position in response to a predetermined change in the pressure of the conditioning medium, a device for opening and closing a passageway from which conditioning medium is discharged from the valve, and means for operating said device in response to changing conditions in an area being air conditioned.

2,517,499. DEHUMIDIFYING APPARATUS. William L. McGrath, Syracuse, N. Y., assignor to Carrier Corp., Syracuse, N. Y., a corporation of Delaware. Application May 14, 1947, Serial No. 748,037. 7 Claims. (Cl. 62-140.)



1. In apparatus for removing vapor from air the combination of a casing forming a passageway for air to be conditioned, means for passing air through said passageway, a plurality of porous members disposed in said passageways in the path of air directed therethrough, the pores of said members permitting passage of vapor through the walls thereof while being substantially resistant to the passage of air, means for passing a second air stream through said members, refrigerating equipment for removing moisture from the second air stream, vapor pressure within said passageway exteriorly of said members being greater than the vapor pressure interiorly of said members, whereby moisture from the air being conditioned migrates into the interior of said members and is removed by the passage of said second air stream through said members and means connecting the refrigerating equipment to said members permitting the second air stream to circulate therethrough.

AVAILABLE FOR LICENSE OR SALE

Pat. 2,462,743. **DOOR-CUPBOARD AND TRAY.** Patented Feb. 22, 1949. Cupboard for refrigerator door has a panel-shaped closure hinged at lower edge to the door. The panel has a stud at center to detachably receive a rotatable serving tray. When not in use, panel swings upwardly against door, and a keeper at top of panel engages a push button fastener on door. The tray has spaced bearing balls on underside to support tray in dispensing position on the panel or upon a table. (Owner) Oscar C. Handel, 3120 Lafayette, Kansas City 2, Kans. Group 35-84. Reg. No. 37,728.

Pat. 2,504,622. **REFRIGERATOR WATER FOUNTAIN.** Patented Apr. 18, 1950. A water container with removable cover is mounted on inner side of refrigerator door. A neck portion at lower end of container has a threaded insulated handle in sleeve formation attached thereto. A rotary valve in neck portion has an opening and a spout and is operable automatically when handle is pulled moving neck portion through an opening in door for dispensing water outside the door. When handle is released, a spring returns fountain to normal position upon the door. (Owners) Harold H. Band and Rae R. Band, 83-52 Talbot St., Kew Gardens 15, New York City, N. Y. Group 35-84. Reg. No. 37,733.

General Electric Co. has placed the following patent on the Register as being available for non-exclusive licensing. Inquiries concerning the patent should be directed to: Manager, Patent Department, General Electric Co., 1 River Road, Schenectady, N. Y.

Pat. 2,503,922. **HEAT EXCHANGER FOR SECONDARY REFRIGERATING SYSTEMS.** Patented Apr. 11, 1950. Group 35-84. Reg. No. 37,773.

By eliminating losses from leaking liquid indicators
Leak-proof
E-Z-SEE
pulls up greater profits



(1) E-Z to see thru—both sides of the body are open to let in light. (2) Positively leakproof—can't leak, springs automatically maintain the right force to form a positive seal. (3) Perfectly Safe, glass protected for pressures up to 500 psi. AT LEADING WHOLESALEERS EVERYWHERE. Literature and prices on request.

REMCO INCORPORATED
ZELIENOPLE, PA.

Subscribe Now

Receive the greatest trade paper in the Industry—AIR CONDITIONING & REFRIGERATION NEWS. Published every week. Brings you latest news and vital information on household refrigeration, commercial refrigeration, air conditioning, home freezers; manufacturing, distributing, retailing, servicing, and contracting. Only \$5 per year, 52 issues.

Fill in coupon and mail today

AIR CONDITIONING & REFRIGERATION NEWS
450 West Fort Street, Detroit 26, Michigan

Gentlemen: Send the NEWS for one year.

☐ \$5 enclosed ☐ Bill me ☐ Bill the company

Name.....

Company.....

Street.....

City..... Zone..... State.....

1-8-51

WE WILL BUY!
SURPLUS
REFRIGERATION CONTROLS
PRESSURE and THERMOSTATIC
ANY QUANTITIES • MUST BE NEW
Write, Phone Or Call For
IMMEDIATE ACTION
TRACO Industrial Corp.
455 W. 19 St., N. Y. 19, Watkins 4-4302
(Send for Traco's complete list of sensational bargains)

BOOK REVIEW

Heat Pump Applications

Heat Pump Applications by Emory N. Kemler and Sabert Oglesby, Jr. 300 pages, 6 by 9 in. Price \$6. Published by McGraw-Hill.

Representing a noteworthy and much needed addition to the growing literature on the heat pump, this book approaches the subject from the viewpoint of practical applications, as its title implies. It does, however, include a section on thermodynamics of refrigerants and cycles to show how these basic principles affect the practical problems involved in heat pump applications.

After first outlining the subject, the authors then describe in detail numerous existing heat pump installations classified as commercial, industrial, and residential.

There are seven commercial applications described, four of which are utility properties, two are office buildings, and one is a theater in Buenos Aires. While most of this data has been published in the past, it is here conveniently summarized.

As for industrial applications of the heat pump, the authors point out that Switzerland has made the most rapid advancement of necessity because of fuel shortages. From a study of seven industrial heat pump installations in that country, the authors found that the heat pump was "directly competitive with thermal processes using coal as a fuel if the cost of 910 kwh. of electricity was equal to the cost of 1 ton of coal."

A wide variety of applications is included in the chapter on industrial uses, including a cheese factory, paper mill, central heating, railway cars, trucks, packing plants, etc.

For residential applications, the authors limit themselves to discussing the various types of package heat pump systems that have been placed on the market because they believe that only by means of a factory-produced unit can the first cost be reduced to a reasonable figure for residential and commercial jobs.

Considerable space is devoted to heat sources for the heat pump, but it is pointed out that "the basic problem in planning any heating plant, whether it concerns a fuel or a heat pump, is securing an economical and satisfactory source of heat." Thus, while this problem may be accentuated with a heat pump it is certainly not peculiar to it. In this chapter the authors also review the data and formulas now available for determining available heat transmission from air, water, and the ground.

To round out the volume, there are chapters devoted to the components that make up a heat pump system: compressors, motors, fans and ducts, heat exchangers, etc., plus a section on abstracts from heat pump patents.

WE WILL BUY!
SURPLUS
REFRIGERATION V BELTS
ANY QUANTITIES • MUST BE NEW
Write, Phone Or Call For
IMMEDIATE ACTION
TRACO Industrial Corp.
435 W. 19 St., N. Y. 19, Watkins 4-4302
(Send for Traco's complete list
of sensational bargains)



RADIAL
UNIT COOLERS
by
KRAMER

The original Circular Unit.
A distinctive Kramer
development that
has no equal.

KRAMER TRENTON CO. Trenton 5, N. J.

Perfex Corp. Service Sessions Planned for 3 Localities In East

MILWAUKEE—Three more localities are slated for the free factory training school sessions presented at various colleges under the sponsorship of Perfex Corp., here, manufacturer of automatic heating controls.

The Farmingdale, L. I., school is to be conducted at the Long Island Agricultural & Technical Institute and is scheduled for three nights, Jan. 29, 30, and 31.

In Newark, N. J., night classes will be held on Feb. 5, 6, and 7 at Newark College of Engineering, where registration will be limited to approximately 125.

The third city on the list is New York City where the Walter Hervey Junior college at 15 W. 63rd St. is to be the scene of meetings on Feb. 18, 19, and 20. Registration here is limited to 75. Other sessions in New York City will be scheduled during March.

Planned to provide more knowledge about operation of controls on heating plants, Perfex offers this instruction free to heating dealers, contractors, wholesalers, utilities, oil companies, their servicemen and salesmen.

Students receive technical training from skilled engineers, participate in classroom discussions, and work with actual heating system equipment. The course includes instruction in the fundamentals of heating. Other subjects covered are warm air, hot water, steam, electric, and unit heater systems; oil, gas, and coal burners; and field and service engineering.

Admiral Gets Video, Radio Rights To Key Sport Events

CHICAGO—Admiral Corp. has acquired the radio and television rights to broadcast three major sporting events of the *Chicago Tribune* Charities next year, Seymour Mintz, advertising director announced.

The events are the Chicago finals of the Golden Gloves boxing tournament, March 9; finals of the International Golden Gloves competition, March 29, and the College All Star—Professional League Champions football game, to be held here Aug. 17.

Financial arrangements between Mintz and Arch Ward, *Tribune* sports editor and vice president of the charities, call for payment of \$100,000 for the football game and \$22,500 for each of the boxing contests, a total of \$145,000.

M. L. Ackerman Heads New Schaefer Factory Branch

MINNEAPOLIS—B. W. Hanson, president of Schaefer, Inc., here, has announced the opening of a new factory branch located at 455 West 19th St., New York City.

Morton L. Ackerman has been appointed regional sales manager and will be in charge of operations at the newly-established factory branch.

Adequate showroom facilities will feature the complete line of Schaefer equipment, such as ice cream cabinets, "Pak-A-Way" home and farm freezers, and "Clearview" frozen food display cases, the company stated. The entire line will be available for immediate delivery from a warehouse located at the same address in New York City.

Government Contracts

PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the purchasing office under which the purchase is listed in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date. This will save time in filling your request. For reasons of economy, specifications are normally not included with the bid invitations unless the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings at the time the request for a bid set is made.

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Rock Island Arsenal; Springfield Arsenal; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. Ordnance District Offices do not have information on any other purchases.

Description	Quantity	Invitation No.	Opening Date
Commanding Officer, Frankford Arsenal, Philadelphia, Pa.			
Silica Gel	18,000 bags	474	24 Jan 51
Navy Purchasing Office, 111 East 16th St., New York City			
Drink Vending Machines and Spare Parts	4 ea	7999	19 Jan 51
Commanding Officer, Marietta TC Depot, Marietta, Pa.			
Attn.: Central Procurement Agency			
Fittings, Pipe, Brass	11,705 ea	230	26 Jan 51
Fittings, Pipe, Brass and Copper	14,225 ea	231	25 Jan 51
Yards and Docks Supply Office, Port Huene, Calif.			
Attn.: Procurement Division			
Cabinet, Ice Cream, 70 Gal. Cap.	2 ea	20372	15 Jan 51
Spare Parts for One Yr.	2 sets	20372	15 Jan 51
Air Conditioning Unit Complete	1 ea	20786	12 Jan 51

Fluorescent Signs Help Harvester Dealers Sell

CHICAGO — Fluorescent lighted signs advertising International Harvester refrigerators and freezers are now being offered to IH dealers, the company has announced.

The signs are described in a special four-page catalog now being distributed to IH dealers.

The largest style, for outdoor use, is 6 ft. long and 3 ft. high. International Harvester reports that this sign is available to dealers under the company's cooperative advertising plan.

A smaller sign—30 in. long and 12 in. high—is designed for indoor use. It is made with either single or double face. It is also available under the cooperative plan.

Offered dealers free are decals of the sign for door or window display as well as for display on delivery trucks and service vehicles.

M-H Opens Course for Industrial Instrument Users In Philadelphia

PHILADELPHIA — Customer employee courses that will be fitted to specific requirements of each of its industrial instrument users will be opened Jan. 8 at the Philadelphia school of the Minneapolis-Honeywell Regulator Co.

During the past year the school expanded its activities. It held its first seminar for colleges and technical schools, an event attended by professors from upwards of 20 American educational institutions and one from England.

Concentrated sessions were held for chemical operating and equipment executives from nine foreign countries. In addition, specialized courses were held for several trade groups. Similar events are again being planned for 1951, said M. J. Ladden, chief instructor.

"The new courses will cover instruments maintenance and repair," Ladden said. "The classes will be held on a three, five, and 13 weeks basis."

The three-week courses will start on Jan. 8, March 26, and Apr. 30. They will include training in pyrometry, ElectronicK potentiometers and pneumatic automatic control and transmission. The five-week classes, starting Feb. 12 and May 28, will include the same subjects, also flow meters, thermometers, pressure gauges, and hygrometers.

The comprehensive 13-week course, to be held from Feb. 12 to May 11, will include instruction on millivoltmeter-type pyrometers, continuous balance (ElectronicK) potentiometers, electrically-operated automatic control, flow meters, thermometers, pressure gauges, hygrometers, air-operated automatic control, Moist-o-Graphs, tachometers, resistance thermometers, gas analysis, pH and conductivity instruments.

Westinghouse Plans New Indiana Small Motor Plant

UNION CITY, Ind.—The Westinghouse Electric Corp. will build a new plant for the production of small electric motors in Union City.

This was announced recently by C. C. Shutt, manager of the Westinghouse small motor division, whose headquarters is at the division's main plant in Lima, Ohio.

The new plant will be a modern one-story structure containing both manufacturing and office space. When in full operation, Shutt said, the plant will employ approximately

500 men and women. Production is expected to start late in 1951.

"This additional facility is necessary because of increased demand for fractional horsepower motors arising from the nation's defense program and from increased building of industrial plants," Shutt further declared.

"In the event of complete mobilization for national defense, the facilities of this new plant will be devoted to the production of motors essential to that program."

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$5.00 per insertion. Limit 50 words. 10¢ per word over 50.
RATES for all other classifications \$7.50 per insertion. Limit 50 words. 15¢ per word over 50.
ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

POSITIONS WANTED

SALES MANAGER available. Strong closer, 20 years experience in air and commercial refrigeration. Wishes to sell direct or wholesale, packaged goods or specialties for manufacturer or distributor. Will travel. Write BOX 3637, Air Conditioning & Refrigeration News.

AVAILABLE JAN. 1st. Present position as chief engineer consulting firm, involving entire responsibility for air conditioning, refrigeration and heating design, layout and construction supervision, over two million dollars worth of work yearly; terminated due to dissolution of firm. Desire connection with architect-engineer or industrial organization in Southeast. BOX 3645, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

SALESMAN FOR Hussmann distributor in San Diego, California. Must be experienced in food store layout and equipment. Salary, expenses and bonus. This is an excellent opportunity for the right man. Must have proven record and best references, none other need apply. WRIGHT REFRIGERATION, INC., 4025 Pacific Highway, San Diego, California.

FIELD SERVICE Representative wanted by large Midwest appliance manufacturer. Former distributor service manager or person with field service experience. Free to travel small territories. This is an excellent opportunity with unlimited possibilities for advancement. Write, stating complete history, references, background and experience. Replies held confidential. BOX 3636, Air Conditioning & Refrigeration News.

ENGINEER—CAPABLE mature man for contract engineering on Carrier equipment up to 100 tons. Must know control wiring circuits, duct design, equipment piping on heating and cooling. We want the best man available and will pay accordingly. Location, Philadelphia, Pa. All replies must include complete resume. Address BOX 3644, Air Conditioning & Refrigeration News.

SERVICE AND installation superintendent capable of handling entire operation these departments for Carrier major dealer in leading Florida city. Must be top notch man. Salary \$5,200.00 to \$6,000.00 per year. Some sheet metal experience also helpful. All replies confidential. BOX 3646, Air Conditioning & Refrigeration News.

EQUIPMENT WANTED

AIR CONDITIONING. Will buy dealers' surplus stock of well known equipment. All sizes. BOX 3643, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

WHOLESALE SEALED unit rebuilding. We will rebuild and convert your unit to "Freon-12." One year guarantee. Write for price list and shipping instructions. ADVANCE REFRIGERATION COMPANY, 829 East McNichols Road, Detroit 3, Mich.

COMPRESSOR BODIES, brand new; model #19, good up to 1-H.P. @ \$41. each; includes flywheel and one service valve. Write for circular. MANN REFRIGERATION SUPPLY CO., 15 Astor Place, NYC, GRamercy 3-8000.

1/4-H.P. open type units, less receiver, less motor, brand new in original crates, specially priced at \$27.95 each. NEW YORK REFRIGERATION CO., 35 East Fourth Street, New York 3, N. Y.

BUSINESS OPPORTUNITIES

ENGLISH MANUFACTURERS of domestic refrigerators either complete or hermetic and absorption type units and evaporators separately for local assembly, wishes to contact lively agents in all U.S.A. states. Make use of devaluation while it lasts. Airmail at once for free lists and particulars. LONGFORD ENGINEERING CO., LTD., Dept. A.C., Bognor, Regis, Sussex, England.

PROFITABLE COMMERCIAL refrigeration, air conditioning and heating business, in Northwestern Illinois city of 25,000 population; no competition, franchised dealer, nationally known equipment, clean stock, new trucks, equipped shop, long term lease, reasonable rent; owner has other interests; inquiries confidential; capital required about \$30,000. Write BOX 3647, Air Conditioning & Refrigeration News.

MISCELLANEOUS

NORGE SEALED units remanufactured and exchanged. Immediate delivery from stock, 1 year warranty. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Complete set of three, \$1.45 plus postage. MODERN REFRIGERATION CO., INC., 12541 E. McNichols Road, Detroit 5, Michigan.

WE WILL BUY!
SURPLUS REFRIGERATION UNITS
BELT-DRIVEN OR HERMETICS
1/6 H.P. to 10 H.P.
ANY QUANTITIES • MUST BE NEW
Write, Phone Or Call For
IMMEDIATE ACTION
TRACO Industrial Corp.
435 W. 19 St., N. Y. 19, Watkins 4-4302
(Send for Traco's complete list
of sensational bargains)

FRB Explains 'W' On Over-Allowance, Limits to Exemption

WASHINGTON, D. C.—Two more interpretations of Regulation W were recently issued by the Federal Reserve Board here.

They were:

1. Over-allowances on trade-ins are permitted as long as the cash price of the article being purchased is not raised to offset the amount of the over-allowance.

2. Exemptions from Regulation W in disaster areas are limited to those specific areas designated by the Federal Reserve Bank in that particular district and are limited to remedying the actual injury sustained. They apply to replacements only when the cost of repair is greater than that of replacement and when the value of the replacement is the same or less than that of the lost property.

On over-allowances, the board said that Regulation W "requires that a trade-in be described in the registrant's records, and that the registrant set out the 'monetary value assigned thereto in good faith.'"

"This requirement does not prohibit all over-allowances on trade-ins as such.

"If the registrant can show that the price of the automobile being sold has not been increased to offset any part of the over-allowance on the car accepted in trade, (Reg. W) allows the registrant to show the trade-in at the value at which he accepts it in trade and to treat it as being a down payment to that extent, even though that may be more than the amount for which he expects to be able to sell it.

"In such a case the amount of the down payment requirement on the car being sold would, of course, be calculated on the basis of the price against which the trade-in was allowed.

"Obviously, however, if any over-allowance on a trade-in were added to the cash price of the article being sold, the over-allowance on the trade-in then could not properly be said to be 'assigned thereto in good faith' and the trade-in could not be counted as a down payment to the extent that there had been any offsetting increase in the price of the article being sold."

It should be noted here that in the case of appliances, the trade-in cannot be used as part of the down payment. The amount given for the trade-in merely reduces the total cash price of the article being purchased. The customer must pay 25% of the remainder, after the trade-in allowance has been deducted from the cash price.

The board declared that disaster credit exemptions apply to certain disaster areas where there is a specified finding by the Federal Reserve Bank of the district. Only "credit extended to finance the repair or replacement of property damaged or lost as a result of" the disaster, is exempt from the regulation.

The board explained, "In addition to the applicable limits as to the time within which the credit must be extended, the exemption is limited solely to the area designated by the Federal Reserve Bank, even though such area may not encompass the entire Federal Reserve district.

"The exemption is also limited to remedying the actual injury sustained. As used in the provision, 'repair' is confined to the restoring of the property involved to approximately the condition it was before the disaster, and 'replacement' is confined to the replacing of lost property by similar property having a value substantially equal to or less than that of the property involved before the disaster.

"In most instances, the exemption extends only to repairs. It covers a replacement only in those cases in which the property was lost in the sense of having no salvage value to the owner, or the cost of a replacement as described above would be less than the cost of repairs as so described."

Registrants are required to have records which establish the extent of the damage or loss.

Larsen, Ex-Head of OCD, Gets Borg-Warner Post

CHICAGO—Paul J. Larsen, former director of the Office of Civil Defense of the National Security Resources Board, has been appointed assistant to Roy C. Ingersoll, presi-

Cobalt Orders--

(Concluded from Page 1, Column 4) as cobalt itself is concerned, with respect to its use in magnets for radio and television receivers, the government will apportion some out for such consumer products until the conversion of the industry to military production reaches such a point that it will take all available supplies.

The picture is not so clear in the matter of the use of cobalt oxide in the preparation of frit for porcelain enameling operations. On this point the order says:

"Cobalt oxide cannot be used for any purposes where there is available a mixed cobalt-nickel oxide which is not economical or practicable to separate into cobalt oxide and nickel oxide, provided that the use of this material is not harmful to public health."

Many porcelain enamel authorities don't think that cobalt-nickel, or a low grade concentrate, is practicable or economical, and that pure cobalt-oxide will have to be allocated for porcelain enamel work. The question will then be how much will be available. One good factor is that there is little other use found today for cobalt oxide.

Copper--

(Concluded from Page 1, Column 3) union fittings make the use of any other material dangerous or impractical, or (2) where the valve is of a type designed for use in an air conditioning or refrigeration 'system', or (3) where use of copper tubing and/or brass pipe is permitted."

Among the items listed in the copper ban are:

Refrigerator display cases. Beverage dispensing units and parts thereof (except for carbonators and except for self-contained drinking water coolers).

Soda fountain equipment (except for carbonators).

Food waste disposal units (except for current carrying parts, bearings, and controls).

Grilles and shields, including fresh air inlet boxes and radiator and convector closures.

Louvers.

Gas heater and stove installation connections (except parts essential for proper functioning).

Aluminum--

(Concluded from Page 1, Column 4) announced that, conforming to the new aluminum directive, production schedules in the refrigerator cabinet and unit divisions are now being revised upward.

He said the production cutback of home freezers must necessarily be followed as announced but that, according to present indications, layoffs due to required reductions in this division will be relatively slight.

He cautioned, however, that the increased refrigerator production, now possible, is due directly to the new aluminum order and that future production schedules must necessarily conform to the national material situation. This situation, he added, may change quickly and at any time.

Expand Inventories Now, Group Buyer Tells Dealers

NEW YORK CITY—Buy major appliances for 30 days beyond normal needs and build refrigerator inventories to offset an expected shortage next March.

That was the advice that Sidney Rosenberg, vice president of American Furniture Associates, a local buying office for 200 home furnishings stores, offered to members of his organization.

He told them that there was a severe shortage of both automatic and conventional washers as pre-Christmas sales held up well despite credit restrictions.

He warned them, however, to keep television orders to a minimum because supply would be plentiful in the first quarter.

NPA Policy on Parts Narda Meeting-- Sought by Auto Men

WASHINGTON, D. C.—The National Production Authority recently designated a task group from the automotive parts industry to study an industry request that it be exempted from limitations on use of aluminum, copper, and other vital materials.

The task group was asked to make recommendations for NPA consideration.

It is felt that any general policy decided on by NPA on automotive parts might possibly also be applied to refrigeration parts.

The automotive replacement parts manufacturers industry advisory committee in its meeting with NPA officials emphasized the importance of replacement parts in keeping motor vehicles in operation and asked that no curtailment be placed on production of such parts.

The group requested that automotive replacement parts be considered as separate commodities from new equipment in determining essentiality and that replacement parts be further broken down as to functional and non-functional pieces.

The committee asked further that replacement parts for all types of motor vehicles, including public, private, and industrial, be considered as equal, with no breakdown based on essentiality.

The NPA also appointed a separate task group to make recommendations for the conservation, salvage, substitution, standardization, and simplification of design in order to conserve vital metals.

(Concluded from Page 1, Column 2) ers, distributors, and dealers will participate in the panel discussions, which have been a popular feature of previous conventions.

In conjunction with the convention, a service and equipment exhibition will be staged. The exhibition will open at 8:30 p.m. Sunday, will open during the morning recess on each of the following days, and will open after the closing of the convention program on Monday and Wednesday evenings. Evening hours will extend from 5:30 p.m. to 10 p.m.

On Tuesday evening, the exhibition will remain closed to make way for the association's annual banquet and entertainment.

The Sunday program is light. Only a board of directors meeting and an evening reception are scheduled.

Starting at 9 a.m. Monday, the convention will hit its full stride. Four speakers are scheduled for the morning session to cover association activities, television, credit controls, and manufacturer-dealer relations. Three panels in the afternoon will discuss finance, group insurance, and profitable promotions.

Tuesday's sessions will be devoted entirely to panel discussions. These will cover supplier-dealer relations, records and controls, servicing, franchises, live demonstrations, and selling low saturation products.

Wednesday morning, the dealers will hear talks on the gas industry's promotion plans, sales training, and the electric industry's promotion plans. The afternoon session will consist of a final speech and panel discussion, both on television.

Luncheon sessions for the three

days will be addressed successively by an as yet unnamed member of Congress; Al Robertson, a dealer from Oklahoma; and Earl Lifshy, trade journal editor.

ESA Plans To Use NPA's Industry Advisory Groups

WASHINGTON, D. C.—To save time and help to eliminate misunderstanding, the Economics Stabilization Agency plans to use the same industry advisory committees that are being set up to work with the National Production Authority, it was reported here recently.

Such a device would help the committees by having meetings with both agencies scheduled for the same or succeeding days, it was pointed out. Only when wage stabilization problems are being discussed will labor representatives have to be added to the committee meeting with the ESA, it was pointed out by the agency.

An appliance wholesalers committee is already established and working with the NPA.

Black Named Ad Mgr. of Machinery Div. at Dravo

PITTSBURGH—Appointment of Robert C. Black as advertising manager of the machinery division of Dravo Corp., here, was announced recently by William H. Collins, Dravo director of advertising.

Dravo's machinery division includes the company's heating, ventilating, air conditioning, power plant, piping, and heavy industrial equipment departments.

Our dealers are doing business in a big way WE'LL TELL YOU WHY...

BRUNNER
SINCE 1906

AIR CONDITIONING

First of all Brunner Air Conditioning Units, both self contained and remote, are Brunner built. We have absolute control over every point and every design feature that contributes to their maximum efficiency.

Buyers know what they want. Air conditioning is no longer new and in a highly competitive field prospects will choose carefully. Brunner units are built for long, dependable, care-free operation and these qualities are instantly recognized in comparison.

Brunner has customer acceptance. This name is no stranger to folks who buy refrigeration and air conditioning.

Brunner takes care of their dealers. Modern factories, skilled workmen and specialized production lines give you what you want and when you want it.



THERE'S MUCH MORE TO BE TOLD so fill in below and our factory sales engineer will stop by with all the facts of why you could well be sharing in this profitable business. We'll send 1951 literature along at once.

CUT OUT AND MAIL

Name _____
Company _____
Address _____
City and State _____

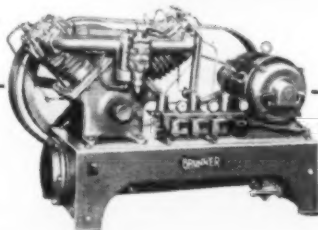
BRUNNER
SINCE 1906

AIR CONDITIONING

● Self Contained 3 HP. to 10 HP.
● Remote Type 3 HP. to 75 HP.

BRUNNER MANUFACTURING CO., Utica 1, New York, U. S. A.

REFRIGERATION CONDENSING UNITS by
AIR AND WATER COOLED MODELS—a size
and type for every purpose... 1/4 HP. TO 75 HP.



BRUNNER
SINCE 1906